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DRAFT SUMMARY OF FINDINGS MEMORANDUM, OPERABLE UNIT 4, SITE 7

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HARDING LAWSON ASSOCIATES

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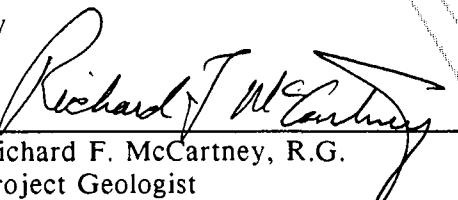
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SUMMARY OF FINDINGS MEMORANDUM
OPERABLE UNIT IV, IR-7 SITE
NAVAL STATION TREASURE ISLAND
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

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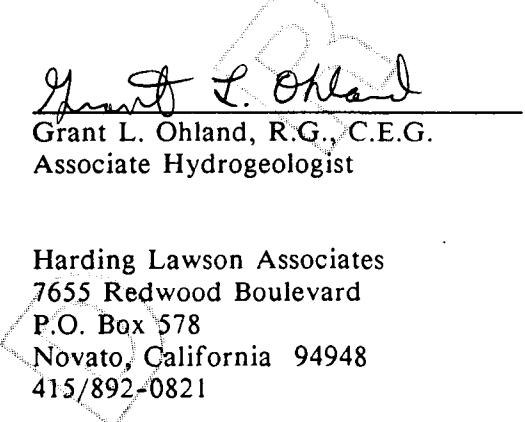

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1.0 INTRODUCTION

This Summary of Findings Memorandum (SFM) has been prepared by Harding Lawson Associates (HLA) under contract to PRC Environmental Management, Inc., on behalf of the Department of the Navy (Navy), Western Division (WESTDIV), Naval Facilities Engineering Command. The SFM was prepared under Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract N62474-88-D-5086, Contract Task Order 57, and pursuant to the requirements of the Federal Facility Agreement (FFA) for the Naval Station Treasure Island, Hunters Point Annex (HPA), dated September 27, 1990. As stated in the FFA, ". . . the Navy shall prepare a Summary of Findings Memorandum (SFM) summarizing the analytical field data, the Navy's evaluation of the data, and any recommendations for revisions to the Sampling Plan (including the need to conduct contingent sampling and/or extend the schedule)."

This SFM presents the results of the primary phase of the remedial investigation (RI) of the Sub-Base Area (IR-7), Hunters Point Annex, San Francisco, California (Plates 1 and 2). Field work and analytical testing were completed as specified in the *Work Plan, Volume 2D, Sampling Plan, Group IV Site (HLA, 1988b)* in accordance with the protocols outlined in the *Work Plan, Volume 3, Quality Assurance Project Plan (QAPjP) (HLA, 1988a)*. The objectives of this report are to: (1) summarize and evaluate the hydrogeologic and chemical data from the primary phase investigation; (2) identify potential data gaps; and (3) prepare recommendations for obtaining the necessary data to complete the RI, if needed.

As part of the Navy's Installation Restoration (IR) program, remedial investigation activities are planned or are currently being conducted at 18 sites at HPA.

The IR sites have been grouped into five Operable Units (OUs). The Sub-Base Area is designated as Site IR-7, and comprises OU IV.

1.1 Remedial Investigation Phased Approach

As described in the work plan (*HLA, 1988b*), the RI at this site is being conducted in three phases: reconnaissance phase (Phase I), primary phase (Phase II), and contingency phase (Phase III). Phase I was completed in February 1989, and the results were presented in a draft report to the regulatory agencies in August 1990 (*HLA, 1990a*). Although the RI work plan proposed that primary phase work be completed in one phase, primary phase work (Phase II) was conducted in two phases, Phases IIA and IIB. The U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) agreed to the two-phase approach during a meeting on November 7, 1990.

Phase IIA field activities, which included soil, intertidal sediment, and groundwater sampling, were completed in December 1990. Preliminary data from Phase IIA were used in selecting soil boring locations and recommending changes to the field and analytical program for Phase IIB. The results and recommendations for Phase IIB sampling program were presented in the draft data submittal dated July 1, 1991 (*HLA, 1991a*). The data submittal was sent to the regulatory agencies (EPA, DTSC, and RWQCB) before beginning Phase IIB field activities. The agencies verbally approved the recommendations for the Phase IIB sampling program on July 5, 1991. A summary of field activities performed during Phases I, IIA, and IIB is presented in Table 1.

1.2 Hydrogeology of Hunters Point Annex

Six geologic units underlie HPA, the oldest unit of which is bedrock of the Franciscan Assemblage. In general, the stratigraphic sequence of these units, from top to bottom, is as follows: artificial fill (Qaf); slope debris or ravine fill (Qsr); undifferentiated upper sands (Quus); Bay mud deposits (Qbm); undifferentiated sedimentary deposits (Qu); and Franciscan Assemblage (bedrock). The Franciscan Assemblage at HPA includes sandstone (KJs), shale (KJsk), chert (KJc), greenstone (KJg), and serpentinite (sp). The bedrock is overlain in some low-lying areas by undifferentiated sedimentary deposits of consolidated sands and clays, which are in turn overlain by a relatively extensive Bay mud unit consisting of soft, highly organic, plastic clay and silt with interbedded lenses of sand and peat. In some areas of HPA, the Bay mud is overlain by poorly graded sands and silty sands, which may be native or hydraulically deposited from dredging operations. These sands are designated as the undifferentiated upper sand unit. In most areas of HPA, artificial fill has been placed over the Franciscan bedrock, the Bay mud, or the undifferentiated upper sand unit. This artificial fill consists of two types of material: (1) bedrock-derived fill from upland areas of HPA and (2) industrial fill consisting of sandblast materials, industrial waste including construction debris, and some domestic waste. Colluvial deposits, referred to as slope debris or ravine fill by Bonilla (1971), may also be present locally above the Franciscan bedrock, the Bay mud, or the undifferentiated upper sand unit. Slope debris and native ravine fill are difficult to differentiate from bedrock-derived fill. Detailed descriptions of geologic units at Hunters Point are presented in Appendix A.

Two aquifers have been defined at HPA: the uppermost aquifer (A-aquifer) and the undifferentiated aquifer (B-aquifer). The A-aquifer is defined as saturated fill

materials and undifferentiated upper sand deposits that overlie the Bay mud deposits.

The A-aquifer is generally unconfined to semiconfined with depths to groundwater ranging from 2 to 15 feet below ground surface (bgs). The B-aquifer consists of undifferentiated sedimentary deposits overlying the Franciscan bedrock. Only limited data are currently available on the B-aquifer. The Franciscan bedrock is not included in either the A- or B-aquifer and has not been designated an aquifer zone.

These two aquifers are separated by Bay mud deposits over the majority of the facility. The Bay mud deposits, which range from less than 5 feet to approximately 60 feet in thickness where present, act as an aquitard between the two aquifers.

Groundwater flow directions at HPA are complex due to the heterogeneity in the hydraulic properties of subsurface fill materials, tidal influences, effects of sewer systems, and variations in topography. Preliminary data indicates that groundwater flow in the southern part of HPA is generally inland as the result of what appears to be groundwater infiltration into the sanitary sewer system. Consequently, saline Bay water appears to recharge the fill materials which comprise the A-aquifer along the southern waterfront. Groundwater flow in the area north of the upland bedrock ridge in the center of HPA, including Site IR-7, is generally outward from the bedrock toward the Bay. In some areas, based on a limited number of observations, local groundwater flow directions have been observed to vary temporally with tidal fluctuation and localized groundwater recharge (inferred) from storm events.

2.0 SITE BACKGROUND

An initial assessment study identified Site IR-7 as a location where hazardous wastes may have been historically disposed or spilled. The assessment was based on available records, interviews, and an onsite survey of activities (*Westec, 1984*).

Site IR-7, approximately a 9-acre site (Plate 2), was subdivided as a result of this study into three areas which consist of the following:

- o The Painting Area - An area used for painting submarine superstructures. Suspect compounds include zinc chromate-based paint and diesel fuel. The area is asphalt paved and contains one building and above and below ground fuel tanks and associated piping.
- o The Sandblast Fill Area - An area allegedly used as a disposal site for sandblast waste generated from the Painting Area. Suspect contaminants within sandblast material include metals, paint scrapings, and possibly radioactive material. The southern portion of this area is asphalt paved.
- o The Additional Area - Portions of this area may have been used for disposal of sandblast waste and possibly of waste liquids/oils on the ground surface associated with the adjacent Triple A site (PA-18). Most of this area is asphalt paved.

2.1 Previous Investigations

As part of the Verification Step of the IR program, EMCON conducted an investigation of Site IR-7 which included the drilling of 12 soil borings, 6 of which were converted to monitoring wells, and the collection of 54 soil samples and 6 groundwater samples (Plate 2). These samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SOCs), total petroleum hydrocarbons (TPH) as gasoline and diesel, metals, and asbestos (*EMCON, 1987a,b*). 1,1,1-Trichloroethane (TCA), trichlorofluoroethane, 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113), polynuclear aromatic hydrocarbons (PNAs), TPH as diesel, and chrysotile asbestos were detected in soil samples collected during the EMCON investigation. Metals, including lead and nickel, were also detected at elevated

concentrations in soil samples. No analytes, except for metals, were detected in groundwater samples from the wells.

2.2 Reconnaissance Phase (Phase I) Investigation

The Phase I activities performed at Site IR-7 included a surface scintillation survey, ground penetrating radar (GPR) profiling, test pit excavation, and one pilot boring (*HLA, 1990a*). Results of the surface scintillation survey showed surface radiation levels to be within natural background levels for HPA and the San Francisco Bay Area. Each of the four GPR profiles (IR07GP01, -02, -03, and -04), three of which were on Site PA-18, indicated a subsurface lithology change which, at that time, suggested a sandblast material boundary in the Additional Area (Plate 2). Five test pits (IR07T01A, -B, -C, and IR07T02A, -B) were excavated on Site PA-18 adjacent to two of the GPR profile locations to evaluate the nature of the underlying lithologies and whether sandblast materials were present. Two of the test pits (IR07T01A and IR07T02B) encountered possible sandblast material at a depth of 3.5 to 4.5 feet. One pilot boring (IR07B031) was drilled to a total depth of 63 feet in the Additional Area; fill material, Bay mud deposits, undifferentiated sedimentary deposits, and weathered serpentinite bedrock were encountered (Plate 2).

3.0 PRIMARY PHASE SAMPLING ACTIVITIES

3.1 Field Activities

During Phases IIA and IIB of the RI performed by HLA, 31 soil borings were drilled with hollow-stem augers. Borings generally were drilled to depths at which either Bay mud deposits or bedrock was encountered. Depths of borings ranged from 14.5 to 51 feet bgs. Soil samples were collected at depths of approximately 1.5 and 3.5 feet, at 5-foot intervals from 5 to 20 feet bgs, and every 10 feet thereafter to the total depth of each boring. Six of the borings were completed as 4-inch-diameter PVC-cased monitoring wells. Three rounds of groundwater samples have been collected for the 12 monitoring wells onsite (the 6 new wells and the 6 wells previously installed); chemical data from only the first two rounds are presented in this report because results from the third round have not, as yet, been received from the laboratory. Four intertidal sediment samples also were collected. Eight additional test pits were excavated by backhoe to minimum depths of 6 feet.

Primary phase field activities, performed in two phases (Phases IIA and IIB), are summarized below and in Table 1.

Primary Phase IIA Activities

- o Drilling of 15 soil borings: IR07B002, -06, -07, -09, -10, -12, -18, -22, -24; and IR07MW19A, -20A1, -20A2, -21A1, -21A2, and -23A (Plate 2 and Appendix B).
- o Collection of 82 soil samples from soil borings.
- o Completion of 6 borings as groundwater monitoring wells in the uppermost aquifer, including two sets of cluster wells (Table 2 and Plate 2).
- o Collection of groundwater elevation data and groundwater samples (first round) from 12 monitoring wells.
- o Collection of 4 intertidal surface sediment samples: IR07SS26, -27, -28, and -29 (Plate 2).

Primary Phase IIB Activities

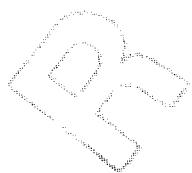
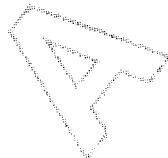
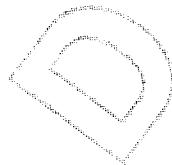
- o Drilling of 16 soil borings: IR07B001, -03, -04, -05, -08, -11, -13, -14, -15, -16, -17, -25, -30, -32, -33, and -34 (Plate 2 and Appendix B).
- o Collection of 111 soil samples from soil borings, including 10 for physical testing and 101 for chemical testing.
- o Collection of groundwater elevation data and groundwater samples (second and third rounds) from 12 monitoring wells.
- o Excavation of 8 test pits: IR07TA05A, -05B, -06, -07, -08A, -08B, -09A, and -09B (Plate 2 and Appendix C). No soil samples were collected because no obvious contamination was observed.

3.2 Analytical Program

A total of 183 soil samples (82 from Phase IIA and 101 from Phase IIB), 4 intertidal surface sediment samples, and 36 groundwater samples (3 rounds from 12 wells; not including QA/QC samples) were submitted for chemical analyses. Samples were analyzed for TPH as gasoline and diesel (excluding soil samples below the groundwater table), total oil and grease (TOG; only soil and sediment at or above groundwater), Contract Laboratory Program (CLP) VOCs, CLP SOCs, CLP pesticides and polychlorinated biphenyls (PCBs) (excluding soil samples below the groundwater table), CLP metals including molybdenum, hexavalent chromium, pH (soil/sediment only), anions/cations (first round groundwater only), and total dissolved solids (TDS; third round groundwater only). No soil, intertidal sediment, or groundwater samples were submitted for radiation analyses because field screening of samples indicated that gamma and beta radiation levels did not exceed three standard deviations above background levels, in accordance with the OU IV Sampling Plan (*HLA, 1988b*). The Navy's surface radiation survey which includes IR-7 is currently being implemented and the results will

be reported separately before the RI report. Analytical methods used for chemical laboratory analyses are listed in Appendix D.

Ten soil samples were submitted for physical testing. Tests included sieve analysis, moisture content, bulk density (wet and dry), specific gravity, porosity, organic content, and permeability. Methods used for physical testing are listed in Appendix D.



4.0 SITE HYDROGEOLOGY

This section describes the geology and hydrogeology at Site IR-7. Geologic units at Hunters Point are described in Section 1.2 and in Appendix A.

4.1 Geology

Cross sections A-A' and B-B' (Plates 3 and 4) depict the subsurface geology encountered at Site IR-7. Plate 2 shows the cross section locations; Plate 5 provides an explanation of lithologic symbols shown on the cross sections.

Of the six geologic units discussed in Section 1.2, four geologic units have been identified within the upper 67 vertical feet at Site IR-7. The units identified at IR-7 are, from top to bottom: (1) bedrock-derived fill (Qaf), which ranges in thickness from approximately 5 to 50 feet; (2) Bay mud deposits (Qbm), which range in thickness from 0 to approximately 20 feet; (3) undifferentiated sedimentary deposits (Qu), which range in thickness from 0 to approximately 6 feet; and (4) the serpentinite subunit of the Franciscan Assemblage (sp [Bonilla, 1971]). Variable amounts of wood debris, brick and ceramic fragments, asphalt debris, metal debris, and possible sandblast material occur in localized areas within the bedrock-derived fill.

Possible sandblast material was encountered in 7 borings at depths ranging from 4 to 21 feet bgs. This material consists of 90 to 100 percent relatively well sorted fine-to medium-grained sand. This type of sand appears to be non-native to HPA because native sands and/or artificial materials derived from native sediments are generally much darker in color. Possible sandblast material encountered at Site IR-7 did not contain paint chips that would indicate it was used for sandblasting operations.

The lower portion of the bedrock-derived fill materials identified in the Painting Area may represent, in part, a fifth geologic unit--colluvial deposits referred to

as ravine fill deposits by Bonilla (1971); the presence of colluvial deposits may account for the absence of Bay mud deposits in this area. Undifferentiated upper sands (Quus), a sixth geologic unit, have also been locally identified within the bedrock-derived fill. Ravine fill deposits and undifferentiated upper sands are not distinguished from bedrock-derived fill on the cross sections because they are not readily distinguished from each other and/or they generally cannot be correlated between borings.

Bay mud deposits have generally not been encountered in the southern portion of the Additional Area where the bedrock surface is topographically higher and is overlain directly by fill material (Plate 4), and in the Painting Area where fill directly overlies bedrock (Plate 3). Bay mud deposits are underlain by undifferentiated sedimentary deposits in the northwestern and western portions of Site IR-7. Bedrock encountered at Site IR-7 is primarily weathered serpentinite. The bedrock surface slopes toward the Bay away from the bedrock high that crops out in the upland areas of HPA.

4.2 Hydrogeology

The A-aquifer at Site IR-7 consists primarily of bedrock-derived fill material (and, to a lesser extent, ravine fill and undifferentiated upper sands) over less permeable bedrock or Bay mud deposits. The aquifer thickness ranges from approximately 0 to 40 feet thick. Groundwater has been measured in A-aquifer wells at Site IR-7 between approximately 6 and 15 feet bgs (Table 3). The lower aquifer (B-aquifer) at IR-7 consists of undifferentiated sedimentary deposits overlying the Franciscan bedrock in the northwestern portion of the site.

All wells at IR-7 are screened in the upper 3 to 17 feet of the A-aquifer, except for the two deep cluster wells (IR07MW20A2 and -21A2), which are screened in the lower 5 feet of the A-aquifer, and Well IR07MWS-1, located upgradient of the site,

which is screened in the upper 11 feet of the weathered serpentinite bedrock. No wells have been constructed in the B-aquifer at IR-7. Well construction details are presented in Table 2. Groundwater flow in the A-aquifer at Site IR-7 is generally north toward the Bay (Plate 6).

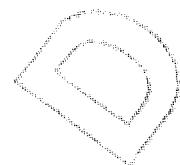
Preliminary data from the tidal influence monitoring program indicate that tidal influence at the site is significant along the shoreline (up to 3 feet in IR07MW20A1) and is minimal further inland (IR07MW23A). Preliminary data suggests that groundwater flow along the shoreline is inland during periods of high tides and toward the Bay during periods of low tides.

Water levels measured in cluster wells screened in the A-aquifer indicate a downward vertical gradient in the A-aquifer in the northeastern area (IR07MW20A1 and -20A2) and the northwestern area (IR07MW21A1 and -21A2) of the site (Plate 6). These downward vertical gradients are maintained during tidal fluctuations.

Water levels measured in Site IR-7 wells between December 1990 and November 1991 show a maximum variation in groundwater elevations across the site of 1.76 (November 25, 1991) to 4.53 feet (April 1, 1991) (Table 3); these variations in groundwater levels may reflect the influence of both seasonal groundwater recharge and tidal fluctuations.

Groundwater has been encountered in Monitoring Well IR07MWS-1, screened in weathered serpentinite bedrock within 150 feet of the Site IR-7 boundary. Vertical hydraulic gradients between the bedrock and overlying fill cannot be evaluated at Well IR07MWS-1 because the fill materials are unsaturated at this location. No other wells have been screened in the bedrock at or near Site IR-7.

Slug tests were performed on 10 wells at Site IR-7 during the Phase I aquifer testing program (*HLA, 1991c*). Nine wells, screened within clay to gravel fill have hydraulic conductivities ranging from 4.79×10^{-1} to 2.32×10^2 ft/day. The estimated hydraulic conductivity of weathered serpentinite bedrock, as measured at Well IR07MWS-1, ranged from 4.40 to 4.70 ft/day. Additional aquifer testing, including step-drawdown and constant-rate discharge and recovery testing, will be performed as described in the Phase I aquifer testing report (*HLA, 1991c*). Results from these aquifer tests will be presented in the OU IV RI report.



5.0 ANALYTICAL RESULTS

Analytical results from all soil, groundwater, and intertidal sediment samples are summarized in Tables 4 through 8. Tables 4 and 5 present the number of soil samples with detected, nondetected, and rejected values along with minimum and maximum chemical concentrations for each analyte. Table 6 compares the detected inorganics to background levels. Tables 7 and 8 present the number of groundwater samples with detected, nondetected, and rejected values along with minimum and maximum chemical concentrations for each analyte. Table 9 presents measurements of field indicator parameters for groundwater samples, and Tables 10 and 11 compare detected chemicals in groundwater samples to regulatory action levels.

A complete listing of analytical results for all detected analytes with laboratory-assigned and cursory validation qualifiers is presented in Appendix E.. Tables E-1 and E-2 present organic and inorganic soil and intertidal sediment chemistry data, respectively, and Tables E-3 and E-4 present organic and inorganic groundwater data, respectively. Chemical analytes not detected in any samples are not presented in these tables. Physical testing results are summarized in Table 12; results for sieve analysis and permeability are presented in Appendix F.

A significant number of soil, intertidal sediment, and groundwater samples collected at Site IR-7 during Phase IIA field activities exceeded allowable holding times established by the EPA for TPH, VOCs, SOCs, pesticides, and PCBs. As a result, a number of the analytical results were either rejected if holding times were grossly exceeded for nondetect data and assigned a R qualifier; estimated if holding times were only slightly exceeded for nondetect data; or, if analytes were detected, data were qualified as estimates and assigned a J qualifier indicating the value is an estimate. A

complete explanation of data qualifiers is provided at the end of each table in Appendix E.

5.1 Soil and Intertidal Sediment Chemistry Results

This section presents soil chemistry results for samples collected from soil borings and intertidal sediment sampling locations. Chemical results are summarized below for six general groups of compounds/constituents. Soil and intertidal sediment chemistry results are summarized in Tables 4 and 5 and presented in Tables E-1 and E-2 (Appendix E).

5.1.1 Total Petroleum Hydrocarbons (TPH) as Gasoline and Diesel

TPH as gasoline (gasoline) was detected in 4 soil samples from 2 borings at concentrations ranging from 6.6 to 27 mg/kg in the Sandblast Fill Area and the Additional Area. TPH as diesel (diesel) was detected in 14 soil samples from 10 borings at concentrations ranging from 44 to 2200 mg/kg. TPH as extractable unknown hydrocarbon (EUH) was detected in 9 soil samples from 5 borings at concentrations ranging from 12 to 470 mg/kg. The distribution of diesel and EUH in soil is presented on Plate 7, which shows the maximum concentration of TPH detected in all soil samples collected at each borehole; the distribution of diesel is also shown in cross sections on Plates 8 and 9. Diesel and EUH were found in soil throughout the site.

Gasoline was detected from 2.25 to 6.25 feet bgs. Diesel was detected in soil samples from 1.75 to 6.25 feet bgs and EUH was detected in soil samples from 1.75 to 11.25 feet bgs.

5.1.2 Total Oil and Grease (TOG)

TOG was detected in 55 soil samples in 23 borings at concentrations ranging from 33 to 27,000 mg/kg and in 3 intertidal sediment samples at concentrations ranging

from 750 to 18,900 mg/kg (Table 4 and Table E-1). The distribution of TOG in soil is shown on Plates 7, 8, and 9. TOG concentrations were detected from depths of less than 1 foot to 11.75 feet bgs (Table E-1). The highest TOG concentrations ($>5,000$ mg/kg) are present in intertidal sediment samples (IR07SS27 and IR07SS29) and in Borings IR07B001 (10.25 feet bgs), IR07B002 (3.25 feet bgs), IR07B012 (4.25 feet bgs), and IR07B033 (4.25 feet bgs). Although these highest concentrations (excluding intertidal sediment samples) appear to be in localized areas in the southwestern portion of the Sandblast Fill Area and in the western portion of the Additional Area, relatively high TOG concentrations ($>1,000$ mg/kg) are distributed throughout Site IR-7.

5.1.3 CLP Semivolatile Organic Compounds (SOCs)

One class of SOCs, the polynuclear aromatic hydrocarbons (PNAs), were detected in 45 soil samples from 17 borings and in 1 intertidal sediment sample (IR07SS28) (Table 4 and Table E-1). The distribution of total PNAs are shown on Plates 7, 8, and 9. All PNAs detected in a sample were summed to obtain the total PNA concentration and have been presented in these plates in units of mg/kg for consistency with the units presented for the TPH and TOG analyses.

The highest total PNA concentrations (>10 mg/kg) were detected in Boring IR07B033 at 1.75 feet bgs (32.67 mg/kg), Boring IR07MW21A2 at 5.62 feet bgs (17.50 mg/kg), and Boring IR07B001 at 20.75 feet bgs (10.45 mg/kg). Total PNA were detected primarily within the artificial fill throughout both the Sandblast Fill Area and Additional Area. The vertical distribution of PNAs has generally been defined across the site with the exception of three boring locations; PNAs were detected in the bottom-most sample in Borings IR07B002 at 20.75 feet, IR07B015 at 31.75 feet, and IR07B032

at 21.25 feet. PNAs have also been detected in weathered serpentinite bedrock (IR07B002 at 20.75 feet) and Bay mud deposits (IR07B001 at 20.75 feet).

Other detected SOCs included dibenzofuran, 4-methyl phenol, n-nitroso dipropyl amine, n-nitrosodiphenyl amine, benzoic acid, and phthalate compounds. Dibenzofuran was detected in 3 shallow soil samples (<4 feet deep) from 3 borings at concentrations ranging from 47 to 68 µg/kg. All results were qualified by the laboratory with a J, indicating that these data are estimated. 4-methylphenol, n-nitrosodipropylamine, and benzoic acid were detected in 1 soil sample each at concentrations of 42, 790, and 294.83 µg/kg, respectively. N-nitrosodiphenylamine was detected in 6 soil samples at concentrations ranging from 170 to 2300 µg/kg. Phthalate compounds were detected at concentrations from 260 to 1000 µg/kg in soil samples. Since phthalates are common laboratory contaminants and were identified in laboratory blanks, the detection of phthalate compounds in several soil samples may be related to laboratory contamination.

5.1.4 CLP Volatile Organic Compounds (VOCs)

Methyl ethyl ketone was detected in 17 soil samples at concentrations ranging from 3 to 35.36 µg/kg and carbon disulfide was detected in 19 soil samples from 1 to 14 µg/kg (Table 4). These compounds may represent laboratory contaminants.

Toluene was detected in 18 soil samples at concentrations ranging from 1 to 52 µg/kg. Thirteen of these samples from Phase IIA may represent field contamination because toluene-containing electrical tape was used to seal samples during Phase IIA. Toluene has also been identified by some laboratories as a common laboratory contaminant.

Chloroform (36 µg/kg) was detected in one sample from Boring IR07MW21A2. 1,1-Dichloroethene (3.76 µg/kg in 1 sample), 1,1,1-trichloroethane (3 µg/kg in 1 sample), trichloroethylene (2 µg/kg in 2 samples), benzene (2 to 3 µg/kg in 2 samples), bromoform (1 µg/kg in 1 sample), methyl isobutyl ketone (7.18 to 11 µg/kg in 3 samples), 2-hexanone (6.12 to 13.18 µg/kg in 2 samples), chlorobenzene (1 to 2 µg/kg in 2 samples), and xylenes (2 to 4 µg/kg in 2 samples) were detected in soil samples from 8 borings and in 1 sediment sample at low concentrations (Table 4 and Table E-1). The distribution of VOCs is shown on Plate 10.

5.1.5 CLP Pesticides/PCBs

Pesticides were detected in 18 soil samples from 11 borings (Table E-1). The distribution of pesticides is shown on Plate 11. The most frequently detected analyte was 4,4-DDT with concentrations ranging from 4.5 to 540 µg/kg (Table 4). Pesticides (aldrin 4,4'-DDE, dieldrin, endrin, 4,4'-DDD, 4,4'-DDT, and methoxychlor) were detected at depths between 1.75 and 10.25 feet bgs throughout the Sandblast Fill Area and Additional Area, including Boring IR07B022 at the PA-18 site (Table E-1). The maximum concentrations for pesticides detected in each boring were within the upper 7 feet of the surface.

The PCB mixture Aroclor-1260 was detected in 3 soil samples from 2 borings (IR07B011 and -25) and in 1 intertidal sediment sample (IR07SS26) at concentrations ranging from 62 to 340 µg/kg. PCBs were detected from 0.5 (intertidal sediment sample) to 3.75 feet bgs in both the Sandblast Fill Area and the Additional Area (Plate 11 and Table E-1).

5.1.6 Inorganic Constituents

Table 5 provides a statistical summary of the inorganic compounds detected (Table E-2), including the minimum and maximum detected concentrations. All soil samples were grouped by lithology and selected metal concentrations were then compared to preliminary lithology-specific background levels established in the *Background Sampling Plan (HLA, 1990b)*. Soil samples obtained from Bay mud deposits, undifferentiated sedimentary deposits, and intertidal sediment samples, which represent lithologies not evaluated in the Background Sampling Plan, were evaluated by comparison of detected values with the preliminary background levels for nonserpentinite fill. Table 6 presents the range of background levels for the different lithologies and the number of borings and sediment sample locations in which concentrations exceeded preliminary background levels. Table 6 also presents, for comparison, the Total Threshold Limit Concentration (TTLC). Arsenic, lead, and nickel were found at concentrations above the TTLC in 1, 5, and 19 samples, respectively. All other detected metals were below the TTLC.

Lead, zinc, barium, arsenic, copper, and cadmium were detected above background levels in 29, 21, 17, 12, 12, and 11 borings, respectively (Table 6). Other metals were detected above background levels in less than 8 borings. The distribution of the four priority pollutant metals most frequently detected above background (arsenic, copper, lead, and zinc) are shown on Plates 12, 13, and 14 (map view and cross sections). The highest concentrations (>1000 mg/kg) of lead were detected in Boring IR07B001 at 16.25 feet bgs (2480 mg/kg), IR07B011 at 21.25 feet bgs (2480 mg/kg), IR07B012 at 4.25 feet (1520 mg/kg), IR07B016 at 16.25 feet (4544.38 mg/kg) and in one sediment sample (IR07SS27 at 1300 mg/kg); lead was detected above background levels throughout the site at varying depths. The highest

concentrations of zinc (>500 mg/kg) were detected in Boring IR07B003 at 3.75 feet (660 mg/kg), IR07B009 at 3.75 feet (514 mg/kg), IR07B010 at 7.62 feet (736 mg/kg), and in one sediment sample (IR07SS27 at 1560 mg/kg). Relatively high concentrations of arsenic and copper were also detected in the Painting Area in soil samples from Borings IR07B017 and 18 between approximately 30 and 40 feet bgs.

Hexavalent chromium was detected in 3 out of 180 samples at concentrations ranging from 140 to 410 $\mu\text{g}/\text{kg}$. Soil pH ranged from 6.4 to 11.4.

5.2 Groundwater Chemistry Results

This section presents groundwater chemistry results for the first two rounds of groundwater sampling at Site IR-7. Three groundwater sampling rounds have been performed to date, on: (1) December 1990, (2) July 1991, and (3) December 1991. Only the results of the first two rounds of sampling are presented in this SFM because laboratory results for the third round are not available at the time of this report preparation. The results of the third round of sampling will be presented in the RI report for OU IV.

Chemical results are summarized below for five general groups of compounds/constituents. Groundwater chemistry results are summarized in Tables 7 and 8 and presented in Tables E-3 and E-4 (Appendix E). Measurements of field indicator parameters (i.e., pH, turbidity, temperature, electrical conductivity, and alkalinity) are summarized in Table 9.

5.2.1 TPH as Gasoline and Diesel

No TPH as gasoline or diesel was detected in groundwater samples from either round of groundwater sampling.

5.2.2 CLP SOCs

No SOCs were detected in groundwater samples from either round of groundwater sampling.

5.2.3 CLP VOCs

Vinyl acetate, 2-hexanone, and 1,1,2,2-tetrachloroethane were detected in one groundwater sample collected from Well IR07MW21A1 at 2, 4, and 1 µg/L, respectively, during the second round of sampling (Table 7 and Table E-3). These compounds were not detected in groundwater samples collected from any other IR-7 well or in the sample obtained from the same well during the first round of groundwater sampling.

Toluene was detected in one groundwater sample collected from IR07MWP-1 at 1 µg/L during the first round of sampling (Table 7 and Table E-3). Also, 1,1,1-trichloroethane was detected in one groundwater sample collected from IR07MWS-4 at 1 µg/L during the first round of sampling (Table 7 and Table E-3). Neither toluene or 1,1,1-trichloroethane was detected in groundwater samples collected from any other IR-7 wells or in duplicate samples or in the samples obtained from the same wells during the second round. Both toluene and 1,1,1-trichloroethane were detected at concentrations well below current or proposed EPA Maximum Contaminant Levels (MCLs) and state MCLs (Table 10). 1,1,2,2-tetrachloroethane was detected in one sample at a concentration of 1 µg/L, which is equivalent to the state MCL (Table 10).

5.2.4 CLP Pesticides/PCBs

No pesticides or PCBs were detected in groundwater samples from either round of groundwater sampling.

5.2.5 Inorganic Constituents

Table 8 presents a statistical summary of inorganics detected in groundwater, including minimum and maximum values. Inorganic constituents detected in

groundwater have been compared to current and proposed EPA MCLs and state MCLs for drinking water to evaluate groundwater quality at IR-7 (Table 11).

Lead, thallium, antimony, barium, beryllium, and chromium were detected above either current or proposed EPA MCLs and/or state MCLs in 2, 1, 3, 2, 1, and 1 groundwater samples, respectively (Table E-4). Concentrations of these metals did not exceed these levels in groundwater samples collected from the same monitoring wells during the other groundwater sampling round. No hexavalent chromium was detected in samples from any well. Numerous detections of iron, manganese, chloride, and sulfate were above state secondary drinking water MCLs (Table 11).

Nickel exceeded proposed EPA MCLs in samples collected from 7 wells during both sampling rounds (IR07MW20A2, -P-1, -P-2, -S-1, -S-2, -S-3, and -S-4) and in one sample collected from one well (IR07MW20A1) (Table E-4).

Calcium was detected above 100 mg/L in samples from all wells except for all samples from upgradient Wells IR07MW23A and -S-1 and for one sample from Well IR07MW21A1. Magnesium and sodium were detected above about 100 mg/L in all samples from Site IR-7 wells (Table E-4). Chloride was detected above 200 mg/L in all samples from Site IR-7 wells.

5.3 Physical Testing Results

This section presents the results of physical testing of selected soil samples from soil borings at Site IR-7. A summary of physical testing results for 10 soil samples is presented on Table 12.

All samples were collected from the artificial fill materials with the exception of a silt sample which was collected from the Bay mud (Qbm) and a clayey sand sample which was apparently collected from the undifferentiated sedimentary deposits (Quus).

Five of the soil samples were disturbed during sampling as a result of gravel in the samples. Consequently, these 5 samples could only be analyzed for grain size determination (i.e., sieve analysis) and organic content.

Sieve analyses resulted in the classification of the remaining five samples as sandy low plasticity (lean) clay, silt, and clayey sand (Appendix F). Moisture contents for the 5 samples ranged from 16.2 to 57.2 percent by weight and dry bulk densities ranged from 66.0 to 115.6 pounds per cubic foot. Porosity values ranged from 34 percent for the clayey sand sample to 61 percent for the silt sample. Vertical permeability values ranged from 4.73×10^{-7} centimeters per second (cm/sec) (1.34×10^{-3} feet/day) for one of the sandy low plasticity (lean) clay samples to 2.18×10^{-8} cm/sec (6.18×10^{-5} feet/day) for the other sandy low plasticity (lean) clay sample. Specific gravity values ranged from 2.7 to 2.8.

Organic content for the 10 samples ranged from 1.05 to 3.93 percent with the highest value associated with the silt sample collected from the Bay mud.

6.0 DISCUSSION OF CHEMICAL RESULTS

6.1 Soil and Intertidal Sediment Chemical Data

6.1.1 Organic Constituents

Throughout IR-7, TPH, TOG, and PNAs within the artificial fill materials are apparently randomly distributed with no definite sources of contamination and/or hot spots. As presented on Plates 7, 8, and 9, these constituents are found throughout IR-7 in nearly all borings at concentrations that generally do not indicate proximity to a source. In addition, groundwater was not contaminated with these compounds. This suggests that the volume of surface-related releases of these contaminants was limited; these constituents may have been incorporated into the fill prior to or during emplacement of the fill.

PNAs were found within the deepest sample in three borings and in weathered serpentinite bedrock and Bay mud deposits. As discussed above, the presence of PNAs in fill materials may be related to original contamination of the fill and/or to contamination that occurred during emplacement. One possible explanation for the occurrence of PNA compounds found in native Bay mud sediments and in weathered serpentinite bedrock is that anthropogenic contamination occurred prior to filling of the site. For example, the high concentration (10 mg/kg) of total PNA found within Bay mud in Boring IR07B001 at about 20.75 bgs (2.5 feet below the contact with the artificial fill) may be related to the deposition of fine-grained sediment contaminated with PNAs.

Relatively low concentrations of organochlorine pesticides (aldrin, dieldrin, 4,4'-DDE, endrin, 4,4'-DDD, 4,4'-DDT, and methoxychlor) were identified in soil at concentrations ranging from 2.6 to 540 µg/kg. Generally, the highest values for these chemicals are found at shallow depths, less than about 7 feet. These compounds may

have been sprayed on the surface for insect control prior to paving of the site and subsequently leached into the underlying soil.

6.1.2 Inorganic Constituents

Plates 15 and 16 present plots of concentration versus depth for arsenic and copper, and lead and zinc, respectively, for all soil and intertidal sediment samples collected from Site IR-7. These metals are the four priority pollutant metals most frequently detected above preliminary background levels (Section 5.1.6). Evaluation of the vertical distribution of arsenic and copper show no obvious site-wide trends in concentration with depth (Plate 12); the range of observed values is generally consistent throughout the soil profile. Analytical results for soil samples from individual borings throughout the site (Plates 13 and 14, and Table E-2) show no obvious trends in arsenic and copper concentration with depth. The absence of greater concentrations at shallow depths suggests that surface-related releases do not account for the observed vertical distribution of arsenic and copper. The high concentrations of arsenic in Boring IR07B017 at 31.25 (929.06 mg/kg) feet and copper and in Borings IR07B017 and IR07B018 at 31.25 (2025.63 mg/kg) feet and 40.25 (897 mg/kg) feet, respectively, are anomalous and may be statistical outliers. In the case of copper, they may be related, in part, to the possible presence of copper wire as identified in fill materials in the nearby Boring IR07B016.

In contrast, lead and zinc are generally found, on a site-wide basis, at higher concentrations at depths less than about 20 to 25 feet (Plate 16). Higher lead and zinc values appear to be randomly distributed within the upper 25 feet of the fill materials across the site. However, individual borings (Plates 13 and 14, and Table E-2) do not show distinctly higher lead and zinc concentrations at the shallowest depths relative to

deeper samples within the same boring. This suggests that although higher lead and zinc values may be found within the upper 25 feet of the fill materials on a site-wide basis, localized surface-related releases do not appear to account for the observed vertical distribution of lead and zinc. Instead, the high concentrations of lead and zinc in shallow soil samples may be indicative of previous contamination of the fill materials prior to or during emplacement and/or anthropogenic inputs of lead and zinc.

As presented in Table 6 and discussed in Section 5.1.6, arsenic, lead, and nickel were found at concentrations above the TTLC in 1, 5, and 19 soil samples, respectively. The one high arsenic value at 929.06 mg/kg is anomalous and may be a statistical outlier; the high lead values may be related to contamination other than surface-related releases, as discussed above. The high nickel values above the TTLC are most likely due to the presence of native nickel-rich serpentinite materials in the soil samples. Most high nickel values are found in samples associated with serpentinite materials identified in boring logs (Table E-2 and Appendix B). The draft Background Sampling Plan (*HLA, 1990b*) has identified high nickel concentrations in serpentinite bedrock and serpentinite fill materials at values that are above the TTLC.

Comparison of the lead concentrations in soil (Plates 12, 13, and 14) to TPH, TOG, and total PNA concentrations (Plates 7, 8 and 9) do not, in general, indicate a relationship between these contaminants. For example, the high values of lead found in borings IR07B001, IR07B011, IR07B012, and IR07B016 do not generally appear to be associated with high levels of TPH, TOG, and PNAs. This suggests that the distribution and presence of lead may be unrelated to the presence of petroleum-related compounds such as TPH, TOG, and PNAs.

"Possible" sandblast materials described in Section 4.1 contained zinc, chromium, copper, and lead at concentrations ranging from 42.1 to 247 mg/kg, 26.8 to 302 mg/kg, 13.3 to 258 mg/kg, and 5.7 to 459 mg/kg, respectively. These metals, presumed to be common constituents of paint wastes, are found at concentrations that are not significantly elevated relative to other non-sandblast fill materials encountered at the site. This suggests that possible sandblast materials have not been contaminated with metal-containing paint.

6.2 Groundwater Chemical Data

Groundwater chemistry results indicate that nickel exceeded the proposed EPA MCL of 100 µg/L in groundwater samples collected from both rounds in seven wells and in one well in one sampling round. The high nickel concentrations in groundwater may be related to the occurrence of serpentinite bedrock and serpentinite-containing fill materials in which the wells are screened.

Several other metals (lead, thallium, antimony, barium, beryllium, and chromium) were infrequently detected above MCLs in groundwater samples from one of the sampling rounds. Iron, manganese, chloride, and sulfate were frequently detected above secondary MCLs in both sampling rounds. The presence of these compounds, including nickel, may be related to the native groundwater quality conditions associated with the recharge of saline bay water and the lithology of artificial fill materials and native geologic materials.

7.0 SUMMARY OF FINDINGS

This section summarizes the findings of primary phase investigations at Sites IR-7 relative to the specific objectives of this report.

As stated in Section 1.0, the objectives of this report are to: (1) summarize and evaluate hydrogeologic and chemical data from the primary phase investigation; (2) identify potential data gaps; and (3) prepare recommendations for obtaining additional data, if needed, to complete the RI. The following sections specifically address these objectives.

7.1 Summary of Hydrogeologic and Chemical Data

Hydrogeologic and chemical data collected during the primary phase RI investigation at IR-7 were presented in Sections 4.0 and 5.0 of this report and were discussed in Section 6.0. A summary of findings relative to the evaluation of hydrogeologic and chemical data are presented below:

- o The uppermost aquifer (A-aquifer) at IR-7 consists of the saturated fill materials overlying the Franciscan bedrock or Bay mud deposits. Groundwater flow in the A-aquifer at IR-7 is generally from inland areas toward the Bay. Preliminary data indicate that tidal influence on groundwater levels at IR-7 is significant along the shoreline and is minimal further inland.
- o The lower aquifer (B-aquifer) at IR-7 consists of undifferentiated sedimentary deposits overlying the Franciscan bedrock in the northwestern portion of the site.
- o No wells have been installed in the B-aquifer at IR-7 because no groundwater contamination has been observed in the overlying A-aquifer.
- o Possible sandblast materials encountered in borings, wells, and trenches at IR-7 do not appear to be associated with sandblasting operations due to the lack of observable paint chips in these materials. Soil chemistry results also indicate that these materials do not contain elevated levels of metals or other constituents relative to other artificial fill materials at IR-7.

- Organic and inorganic constituents were observed in soil and intertidal sediment samples throughout IR-7. The presence of these constituents is apparently random, unrelated to surficial releases associated with past site activities (i.e., painting and sandblasting), and may be related, in part, to the contamination of the fill materials prior to or during emplacement.
- No organic compounds were consistently detected in groundwater samples from two consecutive sampling rounds.
- Numerous detections of inorganic constituents above MCLs may be related to native groundwater quality conditions associated with recharge of saline bay water and the lithology of artificial fill materials and/or native geologic materials.

7.2 Potential Data Gaps

Potential data gaps identified during the evaluation of data presented in this report are as follows:

- Phase I aquifer testing results may not be indicative of aquifer hydraulic properties due to the limited reliability of slug test data in relatively permeable sediments.
- The influence of tides on groundwater flow directions and flow velocities in the A-aquifer has not yet been defined.
- The presence of certain VOCs at low concentrations in groundwater samples is uncertain, given that these VOCs were not consistently detected in duplicate groundwater samples or consecutive rounds of groundwater sampling.
- Background and anthropogenic levels of TPH, TOG, PNAs, and metals in the artificial fill materials and native geologic sediments have not yet been defined at IR-7 or at the HPA facility. Consequently, it is uncertain if the lateral and vertical extent of these constituents has been defined to background or anthropogenic levels.

7.3 Recommendations

The implementation of the following recommendations is intended to fill the potential data gaps presented above.

- Implement Phase II aquifer testing to provide more reliable estimates of aquifer hydraulic properties. The scope of Phase II aquifer testing is described conceptually in the Aquifer Testing Work Plan (*HLA, 1991b*)

and in detail in the Phase I Aquifer Testing report (*HLA, 1991c*). Phase II aquifer testing will be implemented after agency concurrence on the proposed scope of work is received.

- Continue implementation of Tidal Influence Monitoring Plan (*PRC, 1991*) to evaluate the effect of tidal influences on groundwater flow.
- Complete laboratory analyses of third round of groundwater sampling to verify the presence or absence of VOCs previously detected in groundwater samples. The third round of groundwater samples were collected from monitoring wells at IR-7 in December, 1991. Results are pending.
- Complete Background Sampling Study in accordance with the Background Sampling Plan (*HLA, 1990b*) to develop facility-wide anthropogenic and background levels for PNAs and metals within the fill materials and native geologic sediments at HPA. The results of this study will be compared to observed soil and groundwater chemistry data from IR-7 in the IR-7 RI report. The Background Sampling Study is currently in progress; results for the Phase II background data analysis will be available in March, 1992.

8.0 SCHEDULE

The OU IV RI program will be completed in accordance with the schedule submitted by the Navy to the regulatory agencies on June 7, 1991, and approved by the regulatory agencies on July 18, 1991. This schedule requires the submittal of the Draft RI report on or before July 17, 1992.

9.0 REFERENCES

- Bonilla, M.G., 1971. *Preliminary Geologic Map of the San Francisco South Quadrangle and Part of the Hunters Point Quadrangle, California*. United States Geological Survey Miscellaneous Field Studies Map MF-311, 1:24,000.
- EMCON, 1987a. *Confirmation Study Volumes I and II, Verification Step, Hunters Point Naval Shipyard (Disestablished), San Francisco, California*. March 19.
- EMCON, 1987b. *Area Study for Asbestos-Containing Material and Inorganic Soil Contamination, Hunters Point Naval Shipyard (Disestablished), San Francisco, California*. July 2.
- Harding Lawson Associates, 1988a. *Work Plan, Volume 3, Quality Assurance Project Plan, Remedial Investigation/Feasibility Study, Naval Station Treasure Island, Hunters Point Annex, San Francisco, California*. May.
- _____, 1988b. *Work Plan, Volume 2D, Sampling Plan, Group IV Site, Remedial Investigation/Feasibility Study, Naval Station Treasure Island, Hunters Point Annex, San Francisco, California*. December 22.
- _____, 1990a. *Reconnaissance Activities Report, Remedial Investigation/Feasibility Studies, Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. August 9. Draft.
- _____, 1990b. *Background Sampling Plan, Naval Station Treasure Island, Hunters Point Annex, San Francisco, California*. October 15. Draft.
- _____, 1991a. *Phase IIA Data Submittal and Recommendations for Phase IIB Sampling Program Modifications: Sub-Base Area, IR-7, Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. July 1. Draft.
- _____, 1991b. *Draft Aquifer Testing Work Plan, Remedial Investigation / Feasibility Study, Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. October 22.
- _____, 1991c. *Draft, Phase I Aquifer Testing Results, Recommendations for Phase II Aquifer Testing, Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California*. November 21.
- PRC Environmental Management, Inc. 1990. *Removal Action Plan/Closure Plan, The Naval Station Treasure Island, Hunters Point Annex, San Francisco, California*. May 29.
- _____, 1991. *Draft Final Tidal Influence Monitoring Plan, Naval Station Treasure Island, California; Hunters Point Annex*. February 22.
- Westec Services, Inc., 1984. *Initial Assessment Study, Hunters Point Naval Shipyard, (Disestablished), San Francisco, California*. October.

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TABLES

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Table 1. Field Activities Completed During OU IV RI Phases
Sub Base Area (IR-7)
Hunters Point Annex

Field Activity	Reconnaissance Phase I	Primary Phase IIA	Primary Phase IIB
Test Pits	IR07T01A IR07T01B IR07T01C IR07T02A IR07T02B	NONE	IR07TA05A IR07TA05B IR07TA06 IR07TA07 IR07TA08A IR07TA08B IR07TA09A IR07TA09B
Intertidal Sediment Samples	NONE	IR07SS26 IR07SS27 IR07SS28 IR07SS29	NONE
Soil Borings	IR07B031	IR07B002 IR07B006 IR07B007 IR07B009 IR07B010 IR07B012 IR07B018 IR07B022 IR07B024	IR07B001 IR07B003 IR07B004 IR07B005 IR07B008 IR07B011 IR07B013 IR07B014 IR07B015 IR07B016 IR07B017 IR07B025 IR07B030 IR07B032 IR07B033 IR07B034
Monitoring Wells	NONE	IR07MW19A IR07MW20A1 IR07MW20A2 IR07MW21A1 IR07MW21A2 IR07MW23A	NONE

Table 2. Well Construction Details
Sub-Base Area (IR-7), Hunters Point Annex

Well Number	Borehole Diameter (inches)	Well Diameter (inches)	Total Depth of Well (feet)	Top of Casing Elevation (feet AMSL)	Screen Interval (feet BTOC)	Sandpack Interval (feet BTOC)	Seal Interval (feet BTOC)	Lithologic Unit Screened
IR07MW19A	12	4	15.5	9.60	5.5-15.5	4-15.5	3-4	Qaf
IR07MW20A1	12	4	23.6	9.65	5.6-23.6	4.1-23.6	2.6-4.1	Qaf
IR07MW20A2	12	4	43	9.23	38-43	36-43	34-36	Qaf
IR07MW21A1	12	4	17.5	14.65	7.5-17.5	5.5-17.5	4.5-5.5	Qaf
IR07MW21A2	12	4	35.5	14.42	30.5-35.5	29-35.5	26.5-29	Qaf
IR07MW23A	12	4	16.4	15.76	6.4-16.4	4.2-16.4	2.2-4.2	Qaf
* IR07MWP-1	8	2	19	9.87	4-19	2.5-19	1.5-2.5	Qaf
* IR07MWP-2	8	2	18.7	9.77	3.7-18.7	2.2-18.7	1.2-2.2	Qaf
* IR07MWS-1	8	2	17.6	10.25	4.6-17.6	3.6-17.6	2.6-3.6	sp (weathered)
* IR07MWS-2	8	2	20	9.13	2.5-17.5	1.5-30.5	0.5-1.5	Qaf
* IR07MWS-3	8	2	19.4	9.75	4.4-19.4	2.9-19.4	1.9-2.9	Qaf
* IR07MWS-4	8	2	21	13.22	6-21	4-32.5	3-4	Qaf

BTOC Below Top of Casing

AMSL Above Mean Sea Level

Qaf Bedrock-Derived Fill

sp Serpentinite Bedrock

* Emcon Wells, (Emcon, 1987b) Volume 2, Appendix E

Table 3. Historical Water Levels
Sub-Base Area (IR-7)
Hunters Point Annex

Well Number/ Date Measured	Time Measured	Ground Surface Elevation (feet MSL)	Depth to Water (feet below ground surface)	Top of Casing Elevation (feet MSL ¹)	Depth to Water (feet below TOC ²)	Water Level Elevation (feet MSL)
IR07MW19A						
12/14/90	10:29	10.13	7.58	9.60	7.05	2.55
1/17/91	10:08	10.13	9.53	9.60	9.00	0.60
4/1/91	8:56	10.13	10.42	9.60	9.89	-0.29
7/30/91	7:30	10.13	9.06	9.60	8.53	1.07
9/3/91	9:30	10.13	9.81	9.60	9.28	0.32
11/25/91	12:01	10.13	8.85	9.60	8.32	1.28
IR07MW20A1						
12/14/90	10:32	10.06	7.09	9.65	6.68	2.97
4/1/91	9:22	10.06	9.08	9.65	8.67	0.98
7/25/91	10:00	10.06	10.24	9.65	9.83	-0.18
9/3/91	11:13	10.06	8.85	9.65	8.44	1.21
11/25/91	12:10	10.06	8.11	9.65	7.75	1.90
IR07MW20A2						
12/14/90	10:37	10.23	11.46	9.23	10.46	-1.23
4/1/91	9:13	10.23	10.66	9.23	9.66	-0.43
7/29/91	10:30	10.23	9.44	9.23	8.44	0.79
9/3/91	9:00	10.23	9.68	9.23	8.68	0.55
11/25/91	12:11	10.23	9.35	9.23	8.35	0.88
IR07MW21A1						
12/14/90	10:49	13.09	11.20	14.65	12.76	1.89
4/1/91	10:08	13.09	10.91	14.65	12.47	2.18
7/29/91	8:30	13.09	11.52	14.65	13.08	1.57
9/3/91	10:27	13.09	11.68	14.65	13.24	1.41
11/25/91	12:55	13.09	11.40	14.65	12.96	1.69
IR07MW21A2						
12/14/90	10:51	12.89	11.33	14.42	12.86	1.56
4/1/91	10:17	12.89	10.72	14.42	12.25	2.17
7/25/91	9:15	12.89	11.49	14.42	13.02	1.40
9/3/91	10:55	12.89	11.67	14.42	13.20	1.22
11/25/91	12:24	12.89	11.32	14.42	12.85	1.57
IR07MW23A						
12/14/90	10:52	16.40	14.61	15.76	13.97	1.79
1/17/91	9:40	16.40	14.76	15.76	14.12	1.64
4/1/91	10:31	16.40	13.02	15.76	12.38	3.38
7/26/91	7:30	16.40	14.59	15.76	13.95	1.81
9/3/91	9:50	16.40	14.84	15.76	14.20	1.56
11/25/91	12:21	16.40	14.61	15.76	13.97	1.79

Table 3. Historical Water Levels
Sub-Base Area (IR-7)
Hunters Point Annex
(continued)

Well Number/ Date Measured	Time Measured	Ground Surface Elevation (feet MSL)	Depth to Water (feet below ground surface)	Top of Casing Elevation (feet MSL ¹)	Depth to Water (feet below TOC ²)	Water Level Elevation (feet MSL)
IR07MWP-1						
12/14/90	10:35	9.85	8.37	9.87	8.39	1.48
1/17/91	9:50	9.85	8.22	9.87	8.24	1.63
4/1/91	9:23	9.85	7.17	9.87	7.19	2.68
7/30/91	10:00	9.85	7.76	9.87	7.78	2.09
9/3/91	9:22	9.85	7.97	9.87	7.99	1.88
11/25/91	11:59	9.85	7.57	9.87	7.59	2.28
IR07MWP-2						
12/14/90	10:41	10.04	7.49	9.77	7.22	2.55
1/17/91	10:00	10.04	9.49	9.77	9.22	0.55
4/1/91	9:06	10.04	10.26	9.77	9.99	-0.22
7/30/91	11:30	10.04	10.19	9.77	9.92	-0.15
9/3/91	9:10	10.04	9.80	9.77	9.53	0.24
11/25/91	12:04	10.04	7.80	9.77	7.53	2.24
IR07MWS-1						
12/14/90	10:45	10.63	8.12	10.25	7.74	2.51
4/1/91	9:49	10.63	6.53	10.25	6.15	4.10
7/29/91	13:30	10.63	7.78	10.25	7.40	2.85
9/3/91	10:40	10.63	7.93	10.25	7.55	2.70
11/25/91	11:55	10.63	7.99	10.25	7.61	2.64
IR07MWS-2						
12/14/90	10:44	9.68	8.46	9.13	7.91	1.22
4/1/91	9:30	9.68	8.08	9.13	7.53	1.60
7/26/91	10:30	9.68	8.07	9.13	7.52	1.61
9/3/91	8:50	9.68	8.33	9.13	7.78	1.35
11/25/91	11:57	9.68	8.00	9.13	7.45	1.68
IR07MWS-3						
12/14/91	11:00	10.31	8.26	9.75	7.70	2.05
4/1/91	10:20	10.31	8.39	9.75	7.83	1.92
7/26/91	9:00	10.31	8.69	9.75	8.13	1.62
9/3/91	8:30	10.31	8.81	9.75	8.25	1.50
11/25/91	12:34	10.31	8.31	9.75	7.75	2.00

Table 3. Historical Water Levels
Sub-Base Area (IR-7)
Hunters Point Annex
(continued)

Well Number/ Date Measured	Time Measured	Ground Surface Elevation (feet MSL)	Depth to Water (feet below ground surface)	Top of Casing Elevation (feet MSL ¹)	Depth to Water (feet below TOC ²)	Water Level Elevation (feet MSL)
IR07MWS-4						
12/14/90	10:58	13.25	11.37	13.22	11.34	1.88
4/1/91	10:12	13.25	11.06	13.22	11.03	2.19
7/25/91	12:30	13.25	11.82	13.22	11.79	1.43
9/3/91	8:35	13.25	12.00	13.22	11.97	1.25
11/25/91	12:29	13.25	11.53	13.22	11.50	1.72

1 MSL = Mean Sea Level adjusted to the 1929 standard

2 TOC = Top of Casing

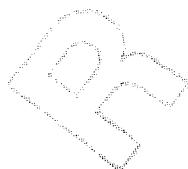
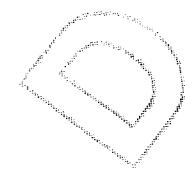


Table 4

Statistical Summary of Organic Compounds Detected in Soil and Intertidal Sediment Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
CLP-VOC							
Chloromethane	187	0	104	83			
Bromomethane	187	0	104	83			
Vinyl chloride	187	0	104	83			
Chloroethane	187	0	104	83			
Methylene chloride	187	0	183	4			
Acetone	187	0	162	25			
Carbon disulfide	187	19	91	77	ug/kg	1.00	14.00
1,1-Dichloroethene	187	1	103	83	ug/kg	3.76	3.76
1,1-Dichloroethane	187	0	104	83			
1,2-Dichloroethene (total)	187	0	104	83			
Chloroform	187	1	104	82	ug/kg	36.00	36.00
1,2-Dichloroethane	187	0	104	83			
Methyl ethyl ketone	187	17	105	65	ug/kg	3.00	35.36
1,1,1-Trichloroethane	187	1	104	82	ug/kg	3.00	3.00
Carbon tetrachloride	187	0	104	83			
Vinyl acetate	187	0	104	83			
Bromodichloromethane	187	0	104	83			
1,2-Dichloropropane	187	0	104	83			
cis-1,3-Dichloropropene	187	0	104	83			
Trichloroethene	187	2	102	83	ug/kg	2.00	2.00
Dibromochloromethane	187	0	104	83			
1,1,2-Trichloroethane	187	0	104	83			
Benzene	187	2	118	67	ug/kg	2.00	3.00
trans-1,3-Dichloropropene	187	0	104	83			
Bromoform	187	1	103	83	ug/kg	1.00	1.00
Methyl isobutyl ketone	187	3	102	82	ug/kg	7.18	11.00
2-Hexanone	187	2	102	83	ug/kg	6.12	13.18
Tetrachloroethene	187	0	104	83			
Toluene	187	18	138	31	ug/kg	1.00	52.00
1,1,2,2-Tetrachloroethane	187	0	105	82			
Chlorobenzene	187	2	102	83	ug/kg	1.00	2.00
Ethyl benzene	187	0	104	83			
Styrene	187	0	104	83			
Xylenes	187	2	102	83	ug/kg	2.00	4.00
CLP-SOC							
Phenol	187	0	134	53			
Bis(2-chloroethyl)ether	187	0	134	53			
2-Chlorophenol	187	0	134	53			
1,3-Dichlorobenzene	187	0	134	53			
1,4-Dichlorobenzene	187	0	134	53			
Benzyl alcohol	187	0	134	53			
1,2-Dichlorobenzene	187	0	134	53			
2-Methylphenol	187	0	134	53			
Bis(2-chloroisopropyl)ether	187	0	134	53			
4-Methylphenol	187	1	133	53	ug/kg	42.00	42.00
n-Nitrosodipropylamine	187	1	133	53	ug/kg	790.00	790.00
Hexachloroethane	187	0	134	53			
Nitrobenzene	187	0	134	53			
Isophorone	187	0	134	53			
2-Nitrophenol	187	0	134	53			
2,4-Dimethylphenol	187	0	134	53			
Benzoic acid	187	1	133	53	ug/kg	294.83	294.83
Bis(2-chloroethoxy)methane	187	0	134	53			

Table 4
Statistical Summary of Organic Compounds Detected in Soil and Intertidal Sediment Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
2,4-Dichlorophenol	187	0	134	53			
1,2,4-Trichlorobenzene	187	0	134	53			
Naphthalene	187	10	124	53			
4-chloroaniline	187	0	134	53			
Hexachlorobutadiene	187	0	134	53			
4-Chloro-3-methylphenol	187	0	134	53			
2-Methylnaphthalene	187	14	120	53	ug/kg	40.00	3500.00
Hexachlorocyclopentadiene	187	0	134	53			
2,4,6-Trichlorophenol	187	0	134	53			
2,4,5-Trichlorophenol	187	0	134	53			
2-Chloronaphthalene	187	0	134	53			
2-Nitroaniline	187	0	134	53			
Dimethyl phthalate	187	1	134	52	ug/kg	870.00	870.00
Acenaphthylene	187	0	134	53			
2,6-Dinitrotoluene	187	0	134	53			
3-Nitroaniline	187	0	134	53			
Acenaphthene	187	5	129	53	ug/kg	40.00	1000.00
2,4-Dinitrophenol	187	0	134	53			
4-Nitrophenol	187	0	134	53			
Dibenzofuran	187	3	131	53	ug/kg	47.00	68.00
2,4-Dinitrotoluene	187	0	134	53			
Diethyl phthalate	187	4	131	52	ug/kg	260.00	750.00
4-chlorophenyl phenylether	187	0	134	53			
Fluorene	187	3	131	53	ug/kg	59.00	1900.00
4-Nitroaniline	187	0	133	53			
2-Methyl-4,6-dinitrophenol	187	0	134	53			
n-Nitrosodiphenylamine	187	6	131	50	ug/kg	170.00	2300.00
4-Bromophenylphenylether	187	0	134	53			
Hexachlorobenzene	187	0	134	53			
Pentachlorophenol	187	0	134	53			
Phenanthrene	187	33	102	52	ug/kg	43.00	8900.00
Anthracene	187	7	127	53	ug/kg	36.00	580.00
Di-n-butylphthalate	187	0	154	33			
Fluoranthene	187	27	108	52	ug/kg	37.00	3200.00
Pyrene	187	34	103	50	ug/kg	40.00	5200.00
Butylbenzylphthalate	187	0	135	52			
3,3-Dichlorobenzidine	187	0	134	53			
Benzo(a)anthracene	187	20	115	52	ug/kg	37.00	1900.00
Chrysene	187	32	104	51	ug/kg	36.00	2700.00
Bis(2-ethylhexyl)phthalate	187	0	169	18			
Di-n-octylphthalate	187	1	133	53	ug/kg	1000.00	1000.00
Benzo(b)fluoranthene	187	19	116	52	ug/kg	37.00	1100.00
Benzo(k)fluoranthene	187	11	123	53	ug/kg	45.00	1500.00
Benzo(a)pyrene	187	16	118	53	ug/kg	41.00	1900.00
Indeno(1,2,3-cd)pyrene	187	6	128	53	ug/kg	44.00	480.00
Dibenzo(a,h)anthracene	187	2	132	53	ug/kg	37.00	91.00
Benzo(ghi)perylene	187	8	126	53	ug/kg	50.00	570.00
CLP-PEST/PCB							
alpha-BHC	113	0	79	34			
beta-BHC	113	0	79	34			
delta-BHC	113	0	79	34			
gamma-BHC	113	0	79	34			
Heptachlor	113	0	79	34			
Aldrin	113	3	77	33	ug/kg	2.60	14.00

Table 4
 Statistical Summary of Organic Compounds Detected in Soil and Intertidal Sediment Samples
 Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
Heptachlor epoxide	113	0	79	34			
Endosulfan I	113	0	79	34			
Dieldrin	113	1	79	33			
4,4'-DDE	113	7	74	32	ug/kg	2.90	540.00
Endrin	113	1	79	33	ug/kg	6.60	6.60
Endosulfan II	113	0	79	34	ug/kg	3.60	245.00
4,4'-DDD	113	6	74	33	ug/kg		
Endosulfan sulfate	113	0	79	34			
4,4'-DDT	113	12	69	32	ug/kg	4.50	540.00
Methoxychlor	113	1	78	34	ug/kg	470.00	470.00
Endrin ketone	113	0	79	34			
alpha-Chlordane	113	0	79	34			
gamma-Chlordane	113	0	79	34			
Toxaphene	113	0	79	34			
Aroclor-1016	113	0	79	34			
Aroclor-1221	113	0	79	34			
Aroclor-1232	113	0	79	34			
Aroclor-1242	113	0	79	34			
Aroclor-1248	113	0	79	34			
Aroclor-1254	113	0	79	34			
Aroclor-1260	113	4	76	33	ug/kg	62.00	340.00
TPH DIESEL							
TPH-Diesel	113	14	99	0	mg/kg	44.00	2200.00
TPH-Extractable Unknown Hyd	46	9	37	0	mg/kg	12.00	470.00
TPH GAS							
TPH-Gasoline	113	4	96	13	mg/kg	6.60	27.00
TPH-Purgeable Unknown Hydr	46	0	46	0			
OIL & GREASE							
Total Oil & Grease	111	58	53	0	mg/kg	0.06	27000.00

ug/kg - micrograms per kilogram
 mg/kg - milligrams per kilogram

Table 5
Statistical Summary of Inorganic Compounds Detected in Soil and Intertidal Sediment Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Value Detected	Maximum Value Detected
CLP-CVAA							
Mercury	187	63	124	0	mg/kg	0.10	1.90
CLP-FUAA							
Arsenic	187	153	34	0	mg/kg	0.59	929.06
Lead	80	80	0	0	mg/kg	0.72	1520.00
Selenium	187	6	181	0	mg/kg	0.50	11.46
Thallium	187	0	187	0			
CLP-ICP							
Aluminum	187	187	0	0	mg/kg	269.00	49200.00
Antimony	187	9	172	6	mg/kg	3.80	77.20
Barium	187	173	14	0	mg/kg	2.80	1490.00
Beryllium	187	97	90	0	mg/kg	0.13	1.70
Cadmium	187	77	110	0	mg/kg	0.50	8.00
Calcium	187	183	4	0	mg/kg	316.01	28400.00
Chromium	187	187	0	0	mg/kg	15.60	1300.00
Cobalt	187	187	0	0	mg/kg	5.10	197.00
Copper	187	184	3	0	mg/kg	2.69	2025.63
Iron	187	187	0	0	mg/kg	8910.00	75300.00
Lead	107	86	21	0	mg/kg	1.27	4544.38
Magnesium	187	187	0	0	mg/kg	1600.00	228500.00
Manganese	187	187	0	0	mg/kg	109.00	8490.00
Nickel	187	187	0	0	mg/kg	24.40	3550.63
Potassium	187	151	36	0	mg/kg	152.00	4920.00
Silver	187	53	134	0	mg/kg	0.07	2.90
Sodium	187	147	40	0	mg/kg	67.20	6730.00
Vanadium	187	187	0	0	mg/kg	11.00	113.00
Zinc	187	187	0	0	mg/kg	13.87	1560.00
Molybdenum	187	3	184	0	mg/kg	2.20	3.30
EPA-7196							
Chromium VI	180	3	173	4	ug/kg	140.00	410.00
EPA-9045							
pH	187	187	0	0	pH	6.40	11.40

ug/kg - micrograms per kilogram
mg/kg - milligrams per kilogram

Table 6. Comparison of Inorganic Compounds Detected in Soil and Intertidal Sediment Samples with Preliminary Background Levels and Total Threshold Limit Concentrations Sub-Base Area (IR-7)

Test Method/ Analyte Name	Number of Analyses	Number of Detected Values	Range of Background Concentrations (mg/kg)	Detected Concentrations		Numbers of Borings and Sediment Sample Locations in Which Concen- trations Exceeded Background	Total Threshold Limit Concentration (wet weight) (mg/kg)
CLP-METALS							
		187					
Aluminum		187	NA	49,200	269	NA	NE
Antimony		9	NA	77.2	3.8	NA	500
Arsenic		153	2.7 - 7	929.06	0.59	12	500
Barium		173	185 - 220	1490	2.8	17	10,000
Beryllium		97	1.0 - 1.2	1.7	0.13	8	75
Cadmium		77	2.1 - 2.9	8	0.5	11	100
Calcium		183	NA	28,400	316.01	NA	NE
Chromium		187	800 - 2100	1,300	15.6	1	2,500
Cobalt		187	120 - 200	197	6.1	1	8,000
Copper		184	70 - 120	2025.63	2.69	12	2,500
Iron		187	55,000 - 70,000	75,300	8,910	6	NE
Lead		166	4 - 28	4544.38	0.72	29	1,000
Magnesium		187	NA	228,500	1,600	NA	NE
Manganese		187	1,250 - 3,520	8,490	109	5	NE
Mercury		63	NA	1.9	0.1	NA	20
Nickel		187	2,400 - 6,400	3550.63	24.4	2	2,000
Potassium		151	NA	4,920	152	NA	NE
Selenium		6	NA	11.46	0.5	NA	100
Silver		5	NA	2.9	0.07	NA	500
Sodium		147	NA	6,730	67.2	NA	NE
Vanadium		187	60 - 90	113	11	7	2,400
Zinc		187	73 - 100	1,560	13.87	21	5,000
Molybdenum		3	NA	3.3	2.2	NA	3,500
EPA Method 7196		180					
Chromium VI		3	NA	0.41	0.14	NA	500

Max Value = Maximum concentration detected in any soil or sediment sample analyzed for inorganics.

Min Value = Minimum concentration detected above detection limits in any soil or sediment sample analyzed for inorganics.

NA = No background level has been proposed.

NE = Not established.

Table 7
Statistical Summary of Organic Compounds Detected in Groundwater Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
CLP-VOC							
Chloromethane	33 *	0	16	17			
Bromomethane	33	0	16	17			
Vinyl chloride	33	0	16	17			
Chloroethane	33	0	16	17			
Methylene chloride	33	0	30	3			
Acetone	33	0	24	9			
Carbon disulfide	33	0	16	17			
1,1-Dichloroethene	33	0	16	17			
1,1-Dichloroethane	33	0	16	17			
1,2-Dichloroethene (total)	33	0	16	17			
Chloroform	33	0	16	17			
1,2-Dichloroethane	33	0	16	17			
Methyl ethyl ketone	33	0	16	17			
1,1,1-Trichloroethane	33	1	16	17	ug/L	1.00	1.00
Carbon tetrachloride	33	0	16	17	ug/L	2.00	2.00
Vinyl acetate	33	1	15	17			
Bromodichloromethane	33	0	16	17			
1,2-Dichloropropane	33	0	16	17			
cis-1,3-Dichloropropene	33	0	16	17			
Trichloroethene	33	0	16	17			
Dibromochloromethane	33	0	16	17			
1,1,2-Trichloroethane	33	0	16	17			
Benzene	33	0	16	17			
trans-1,3-Dichloropropene	33	0	16	17			
Bromoform	33	0	16	17			
Methyl isobutyl ketone	33	0	16	17			
2-Hexanone	33	1	15	17	ug/L	4.00	4.00
Tetrachloroethene	33	0	16	17			
Toluene	33	1	16	16	ug/L	1.00	1.00
1,1,2,2-Tetrachloroethane	33	1	15	17	ug/L	1.00	1.00
Chlorobenzene	33	0	16	17			
Ethyl benzene	33	0	16	17			
Styrene	33	0	16	17			
Xylenes	33	0	16	17			
CLP-SOC							
Phenol	33	0	33	0			
Bis(2-chloroethyl)ether	33	0	33	0			
2-Chlorophenol	33	0	33	0			
1,3-Dichlorobenzene	33	0	33	0			
1,4-Dichlorobenzene	33	0	33	0			
Benzyl alcohol	33	0	33	0			
1,2-Dichlorobenzene	33	0	33	0			
2-Methylphenol	33	0	33	0			
Bis(2-chloroisopropyl)ether	33	0	33	0			
4-Methylphenol	33	0	33	0			
n-Nitrosodipropylamine	33	0	33	0			
Hexachloroethane	33	0	33	0			
Nitrobenzene	33	0	33	0			
Isophorone	33	0	33	0			
2-Nitrophenol	33	0	33	0			
2,4-Dimethylphenol	33	0	33	0			
Benzoic acid	33	0	33	0			
Bis(2-chloroethoxy)methane	33	0	33	0			

Table 7
Statistical Summary of Organic Compounds Detected in Groundwater Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
2,4-Dichlorophenol	33	0	33	0			
1,2,4-Trichlorobenzene	33	0	33	0			
Naphthalene	33	0	33	0			
4-chloroaniline	33	0	33	0			
Hexachlorobutadiene	33	0	33	0			
4-Chloro-3-methylphenol	33	0	33	0			
2-Methylnaphthalene	33	0	33	0			
Hexachlorocyclopentadiene	33	0	33	0			
2,4,6-Trichlorophenol	33	0	33	0			
2,4,5-Trichlorophenol	33	0	33	0			
2-Chloronaphthalene	33	0	33	0			
2-Nitroaniline	33	0	33	0			
Dimethyl phthalate	33	0	33	0			
Acenaphthylene	33	0	33	0			
2,6-Dinitrotoluene	33	0	33	0			
3-Nitroaniline	33	0	33	0			
Acenaphthene	33	0	33	0			
2,4-Dinitrophenol	33	0	33	0			
4-Nitrophenol	33	0	33	0			
Dibenzofuran	33	0	33	0			
2,4-Dinitrotoluene	33	0	33	0			
Diethyl phthalate	33	0	33	0			
4-chlorophenyl phenylether	33	0	33	0			
Fluorene	33	0	33	0			
4-Nitroaniline	33	0	33	0			
2-Methyl-4,6-dinitrophenol	33	0	33	0			
n-Nitrosodiphenylamine	33	0	33	0			
4-Bromophenylphenylether	33	0	33	0			
Hexachlorobenzene	33	0	33	0			
Pentachlorophenol	33	0	33	0			
Phenanthrene	33	0	33	0			
Anthracene	33	0	33	0			
Di-n-butylphthalate	33	0	33	0			
Fluoranthene	33	0	33	0			
Pyrene	33	0	33	0			
Butylbenzylphthalate	33	0	33	0			
3,3-Dichlorobenzidine	33	0	33	0			
Benzo(a)anthracene	33	0	33	0			
Chrysene	33	0	33	0			
Bis(2-ethylhexyl)phthalate	33	0	33	0			
Di-n-octylphthalate	33	0	33	0			
Benzo(b)fluoranthene	33	0	33	0			
Benzo(k)fluoranthene	33	0	33	0			
Benzo(a)pyrene	33	0	33	0			
Indeno(1,2,3-cd)pyrene	33	0	33	0			
Dibenzo(a,h)anthracene	33	0	33	0			
Benzo(ghi)perylene	33	0	33	0			
CLP-PEST/PCB							
alpha-BHC	33	0	30	3			
beta-BHC	33	0	30	3			
delta-BHC	33	0	30	3			
gamma-BHC	33	0	30	3			
Heptachlor	33	0	30	3			
Aldrin	33	0	30	3			

Table 7
Statistical Summary of Organic Compounds Detected in Groundwater Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
Heptachlor epoxide	33	0	30	3			
Endosulfan I	33	0	30	3			
Dieldrin	33	0	30	3			
4,4'-DDE	33	0	30	3			
Endrin	33	0	30	3			
Endosulfan II	33	0	30	3			
4,4'-DDD	33	0	30	3			
Endosulfan sulfate	33	0	30	3			
4,4'-DDT	33	0	30	3			
Methoxychlor	33	0	30	3			
Endrin ketone	33	0	30	3			
alpha-Chlordane	33	0	30	3			
gamma-Chlordane	33	0	30	3			
Toxaphene	33	0	30	3			
Aroclor-1016	33	0	30	3			
Aroclor-1221	33	0	30	3			
Aroclor-1232	33	0	30	3			
Aroclor-1242	33	0	30	3			
Aroclor-1248	33	0	30	3			
Aroclor-1254	33	0	30	3			
Aroclor-1260	33	0	30	3			
TPH DIESEL							
TPH-Diesel	33	0	27	6			
TPH-Extractable Unknown							
Hydrocarbon	16	0	16	0			
TPH GAS							
TPH-Gasoline	33	0	16	17			

ug/L - micrograms per liter

* - Samples analyzed include samples from 12 wells collected during 2 sampling rounds and 9 duplicates.

Table 8
Statistical Summary of Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, Site IR-7, Hunters Point Annex

Test Method/ Analyte Name	Number of Samples Analyzed	Number of Samples With Analyte Detected	Number of Samples With Analyte Not Detected	Number of Samples With Analyte Rejected	Units	Minimum Detected Value	Maximum Detected Value
CLP-CVAA							
Mercury	33 *	0	33	0			
CLP-FUAA							
Arsenic	33	4	29	0	ug/L	3.30	4.60
Lead	33	9	24	0	ug/L	2.10	115.00
Selenium	33	0	25	8			
Thallium	33	1	24	8	ug/L	3.10	3.10
CLP-ICP							
Aluminum	33	18	15	0	ug/L	103.00	738.00
Antimony	33	3	30	0	ug/L	14.30	58.60
Barium	33	32	1	0	ug/L	30.90	1040.00
Beryllium	33	1	32	0	ug/L	4.00	4.00
Cadmium	33	3	30	0	ug/L	2.90	3.90
Calcium	33	33	0	0	ug/L	69500.00	481500.00
Chromium	33	13	20	0	ug/L	2.90	1260.00
Cobalt	33	20	13	0	ug/L	6.10	161.00
Copper	33	7	26	0	ug/L	6.00	52.60
Iron	33	22	11	0	ug/L	23.00	50500.00
Magnesium	33	33	0	0	ug/L	99860.00	1587400.00
Manganese	33	33	0	0	ug/L	6.20	7470.00
Nickel	33	33	0	0	ug/L	18.00	7120.00
Potassium	33	33	0	0	ug/L	4673.00	390000.00
Silver	33	4	29	0	ug/L	7.60	25.10
Sodium	33	33	0	0	ug/L	151000.00	9860000.00
Vanadium	33	6	27	0	ug/L	5.00	19.00
Zinc	33	9	24	0	ug/L	7.10	29.30
Molybdenum	33	8	25	0	ug/L	22.30	103.00
EPA-7196							
Chromium VI	32	0	32	0			
EPA-300.0							
Sulfate	17	17	0	0	mg/L	35.00	2510.00
Nitrate	4	0	4	0			
Chloride	17	17	0	0	mg/L	219.00	17000.00
Orthophosphate as P	17	13	4	0	mg/L	0.03	4.50
EPA-353.1							
Nitrate as N	13	4	9	0	mg/L	0.08	0.71
EPA-9045							
pH	33	33	0	0	pH	6.90	7.65

ug/L - micrograms per liter

mg/L - milligrams per liter

* - Samples analyzed include samples from 12 wells collected during 2 sampling rounds and 9 duplicates.

Table 9. Groundwater Sampling Field Parameters
Sub-Base Area (IR-7)
Hunters Point Annex

Well Number	Screened Interval (Feet BGS)	Depth to Water (Feet BTOC)	Date Sampled	Time Sampled	pH	Electrical Conductivity (micromhos per Centimeter) *		Temperature °C	Turbidity (NTU)	Field Alkalinity (mg/L as CaCO ₃)	Gallons Removed	Casing Volumes Removed	Field Observations/ Problems Encountered
						34250	5000						
IR07MW19A	6 - 16	7.61	12/12/90	1230	7.4	34250	18.8	>100	134	17.0	3.0	Greenish gray, silty	
		8.53	7/30/91	0730	7.1	5000	18.3	>100	155	15.0	3.0	Silty, brown	
		8.71	12/05/91	0830	8.9	1900	18.1	>100	145	15.0	3.0	Silty, brown, odorless	
IR07MW20A1	6 - 24	7.05	12/13/90	0930	7.2	38000	17.7	>100	132 (1)	35.0	3.0	Dark brown	
		9.83	7/25/91	1000	6.1	5000	16.0	>100	130	30.0	3.3	Silty, brown	
		6.94	12/02/91	1100	7.1	2750	17.6	>100	130	33.0	3.0	Brownish-orange, odorless	
IR07MW20A2	39 - 44	10.29	12/13/90	1130	7.2	15250	17.4	>100	1460	66.0	3.0	Reddish brown	
		8.44	7/29/91	1030	7.0	2600	18.2	25	1440	70.0	3.0	Silty, brown, clears	
		8.43	12/04/91	1030	7.0	1200	16.0	>100	1410 (1)	70.0	3.0	Clear turning silty, brown	
IR07MW21A1	6 - 16	12.67	12/12/90	1100	7.8	2950	18.6	>100	822	11.0	3.0	Lightly turbid	
		13.08	7/29/91	0830	7.4	850	17.4	>100	840	8.0	3.0	Silty, brown	
		13.17	12/04/91	0830	7.3	700	18.4	>100	830	10.0	3.0	Silty, brown, odorless	
IR07MW21A2	29 - 34	12.98	12/13/90	1245	7.5	18500	16.7	>100	680	18.0	1.3	Greenish gray	
		13.02	7/25/91	0915	6.7	2650	17.5	>100	640	15.0	1.1	Silty, gray	
		13.16	12/02/91	1030	7.5	1850	17.0	>100	680	16.0	1.1	Silty, gray, odorless	
												Dry after removing 17 Gals., sampled after 79% recovery	
IR07MW23A	7 - 17	13.93	12/12/90	0850	7.7	1700	18.7	>100	770	5.0	3.0	Lightly turbid	
		13.95	7/26/91	0730	6.6	900	17.7	>100	790	5.0	3.0	Silty, brown	
		14.18	12/03/91	1030	7.1	700	18.7	46	760	5.0	3.0	Clear, odorless	
IR07MWP-1	4 - 19	8.40	12/18/90	0945	7.0	28500	18.2	>100	208	6.0	3.0	Greenish gray	
		7.78	7/30/91	1000	6.5	5000	18.0	>100	132	6.0	3.3	Silty, brown	
		8.08	12/03/91	0900	6.7	2200	17.1	>100	180	7.0	3.2	Silty, brown, odorless	
IR07MWP-2	4 - 19	7.14	12/17/90	1300	8.9	29000	14.1	>100	104	5.0	3.0	Red-brown	
		9.92	7/30/91	1130	6.9	5000	18.0	>100	100	3.0	3.6	Very silty, brown-orange	
		8.22	12/05/91	2500	7.1	2500	14.2	>100	110	5.0	3.1	Silty, brownish-orange, odorless	

Table 9. Groundwater Sampling Field Parameters
Sub-Base Area (IR-7)
Hunters Point Annex (Continued)

Well Number	Screened Interval (Feet BGS)	Depth to Water (Feet BTOC)	Date Sampled	Time Sampled	pH	Electrical Conductivity (micromhos per Centimeter) *			Temperature °C	Turbidity (NTU)	Field Alkalinity (mg/L as CaCO ₃)	Gallons Removed	Volumes Removed	Casing	
						7000	18.7	>100						Field Observations/ Problems Encountered	
IR07MWS-1	5 - 18	7.74	12/14/90	1245	7.4	7000	18.7	>100	395	4.0	3.0	Greenish gray			
		7.40	7/29/91	1330	7.2	1950	18.6	>100	430	5.0	3.8	Silty, brown			
		7.57	12/04/91	1330	7.0	1100	18.6	>100	410	5.0	3.0	Silty, brown, odorless			
IR07MWS-2	3 - 18	7.75	12/17/90	1130	7.2	12500	17.0	>100	280	7.0	3.0	Silty, gray			
		7.52	7/26/91	1030	6.0	2500	17.2	>100	286	6.5	3.0	Silty, gray			
		7.48	12/05/91	1230	7.0	2100	17.6	>100	300 (1)	7.0	3.0	Silty, gray, odorless			
IR07MWS-3	5 - 20	7.70	12/14/90	1130	7.1	26500	16.9	>100	780	7.0	3.0	Silty, sandy, sheen, odor			
		8.13	7/26/91	0900	6.5	3500	18.2	>100	940	7.0	3.2	Silty, brown			
		7.57	12/03/91	1230	6.9	1850	18.5	>100	910	7.0	3.0	Silty, brown, odorless			
IR07MWS-4	6 - 21	11.52	12/18/90	0815	6.8	28000	17.2	>100	280	6.0	3.0	Greenish gray			
		11.79	7/25/91	1230	6.5	5000	16.9	>100	330 (1)	6.0	3.3	Silty, brown			
		11.55	12/02/91	1230	6.8	2900	16.4	>100	270	6.0	3.0	Silty, brown, odorless			

BTOC Below top of casing

BGS Below ground surface

* Electrical conductivity at the temperature stated

NTU Nephelometric turbidity units

(1) Estimated

**Table 10. Comparison of Organic Compounds Detected in
Groundwater Samples with Maximum Contaminant Levels (MCLs)
Sub-Base Area (IR-7)
Hunters Point Annex**

Test Method/ Analyte Name	Number of Analyses	Units	Number of Detected Values	Max Value	Min Value	Current EPA MCL	Proposed EPA MCL	State MCL
CLP-VOC	33							
1,1,1-Trichloroethane		µg/L	1	1.00	1.00	200	--	200
Vinyl acetate		µg/L	1	2.00	2.00	--	--	--
2-Hexanone		µg/L	1	4.00	4.00	--	--	--
Toluene		µg/L	1	1.00	1.00	--	2000	--
1,1,2,2-Tetrachloroethane		µg/L	1	1.00	1.00	--	--	1.0

Max Value = Maximum concentration detected in any groundwater sample analyzed for organics.

Min Value = Minimum concentration detected in any groundwater sample analyzed for organics; minimum concentration detected may be below the reporting limit.

EPA MCL = U.S. EPA Maximum Contaminant Level for drinking water.

State MCL = State of California Maximum Contaminant Level for drinking water; Title 22, Chapter 15, California Code of Regulations, 1990.

**Table 11. Comparison of Inorganic Compounds
Detected in Groundwater Samples with Maximum Contaminant Levels (MCLs)
Sub-Base Area (IR-7)
Hunters Point Annex**

Test Method/ Analyte Name	Number of Analyses	Units	Number of Detected Values	Max Value	Min Value	Current EPA MCL	Proposed EPA MCL	State MCL
CLP-FUAA	33							
Arsenic		µg/L	4	4.6	3.3	50	--	50
Lead		µg/L	9	115	2.1	50	5	50
Thallium		µg/L	1	3.1	3.1	--	2	--
CLP-ICP	33							
Aluminum		µg/L	18	738	103	--	--	1000
Antimony		µg/L	3	58.6	14.3	--	10	--
Barium		µg/L	32	1040	30.9	1000	5000	1000
Beryllium		µg/L	1	4	4	--	1	--
Cadmium		µg/L	3	3.9	2.9	10	5	10
Calcium		µg/L	33	481500	69500	--	--	--
Chromium		µg/L	13	1260	2.9	50	100	50
Cobalt		µg/L	20	161	6.1	--	--	--
Copper		µg/L	7	52.6	6	--	1300	1000 ¹
Iron		µg/L	22	50500	23	--	--	300 ¹
Magnesium		µg/L	33	1587400	99860	--	--	--
Manganese		µg/L	33	7470	6.2	--	--	50 ¹
Nickel		µg/L	33	7120	18	--	100	--
Potassium		µg/L	33	390000	4673	--	--	--
Silver		µg/L	4	25.1	7.6	--	--	50
Sodium		µg/L	33	9860000	151000	--	--	--
Vanadium		µg/L	6	19	5	10	50	--
Zinc		µg/L	9	29.3	7.1	--	--	5000 ¹
Molybdenum		µg/L	8	103	22.3	--	--	--
EPA-300.0	17							
Sulfate		mg/L	17	2510	35.00	--	--	250 ¹
Chloride		mg/L	17	17000	219.00	--	--	250 ¹
Orthophosphate as P		mg/L	13	0.03	4.50			
EPA-9045	33							
pH		pH	33	7.65	6.90	NA	NA	
EPA-353.1	13							
Nitrate		mg/L		0.08	0.71	10	--	--

Max Value = Maximum concentration detected in any groundwater sample analyzed for organics.

Min Value = Minimum concentration detected in any groundwater sample analyzed for organics; minimum concentration detected may be below the reporting limit.

EPA MCL = U.S. EPA Maximum Contaminant Level for drinking water.

State MCL = State of California Maximum Contaminant Level for drinking water; Title 22, Chapter 15, California Code of Regulations, 1990.

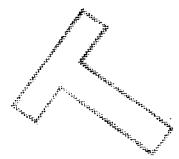
¹ = Secondary Drinking Water Standard.

Table 12. Summary of Physical Testing Results
Sub-Base Area (IR-7), Hunter's Point Annex

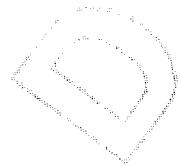
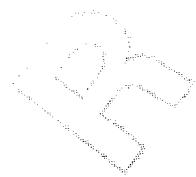
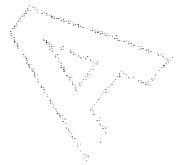
Boring Number	Depth Feet	Sample Number	Soil Classification*	Gravimetric Moisture Content (%)	Bulk Density (Pounds per cubic foot)			Specific Gravity	Porosity (%)	Organic Content(%)	Permeability at 20°C(cm/sec)	Lithologic Unit
IR07B015	26.0	9132H856-P	Brown Sandy Lean Clay w/gvl (CL)	21.1	129.4	106.8	2.8	38	1.97	5.46 E-8	x	Qaf
IR07B025	6.5	9132H854-P	Brown Silty Sand w/gvl (SM)	x	x	x	x	x	2.75	x	x	Qaf
IR07B025	36.5	9132H855-P	Gray Elastic Silt (ML)	57.2	103.6	66.0	2.7	61	3.93	6.82 E-8	x	Qbm
IR07B030	2.0	9133H862-P	Brown Sandy Lean Clay (CL)	16.2	130.0	111.9	2.8	36	2.22	4.73 E-7	x	Qaf
IR07B030	26.0	9133H863-P	Brown Clayey Sand (SC)	18.1	136.0	112.7	2.8	34	1.05	4.16 E-7	x	Quus(?)
IR07B032	2.0	9133H861-P	Brown Sandy Lean Clay (CL)	16.6	134.8	115.6	2.8	35	1.98	2.18 E-8	x	Qaf
IR07B033	2.0	9133H859-P	Gray Clayey Sand w/gvl (SC)	x	x	x	x	x	1.80	x	x	Qaf
IR07B033	20.0	9133H860-P	Gray Clayey Sand w/gvl (SC)	x	x	x	x	x	1.93	x	x	Qaf
IR07B034	26.0	9132H857-P	Red Clayey Sand (SC)	x	x	x	x	x	1.48	x	x	Qaf
IR07B034	36.0	9132H858-P	Red Clayey Gravel w/sand (GC)	x	x	x	x	x	3.30	x	x	Qaf

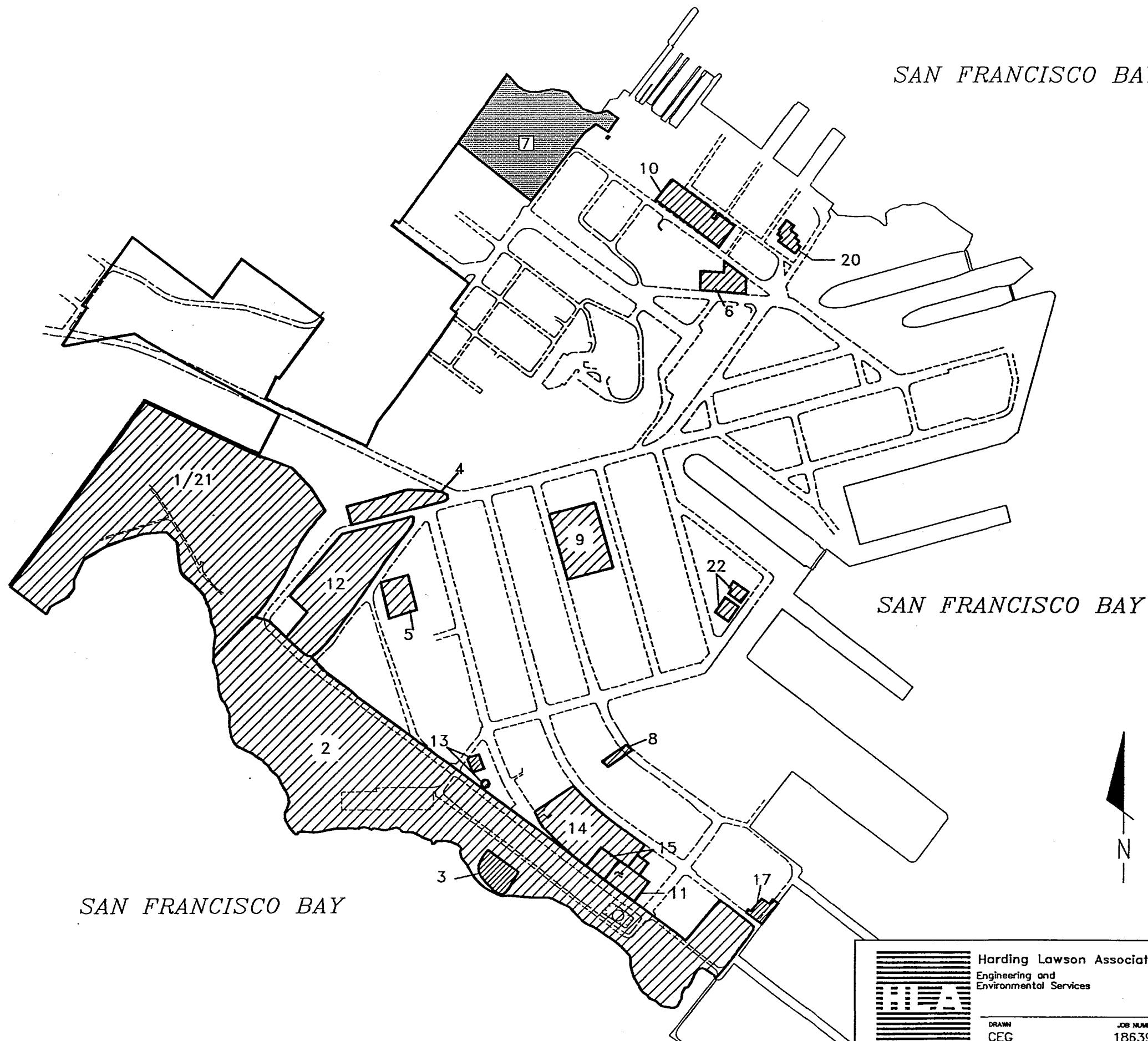
* Soil Classification is based on results of laboratory sieve analyses and visual observation, except for Sample Number 9132H856-P which was visually classified because a portion the soil sample was lost in the laboratory.

x Physical test not performed because of gravel and sample disturbance.



ILLUSTRATIONS





IR SITE#	AREA DESIGNATIONS
1/21	INDUSTRIAL LANDFILL
2	BAY FILL AREA
3	OIL RECLAMATION PONDS
4	SCRAP YARD
5	OLD TRANSFORMER STORAGE YARD
6	TANK FARM
7	SUB-BASE AREA
8	BUILDING 503 PCB SPILL
9	PICKLING AND PLATE YARD
10	BATTERY AND ELECTROPLATING SHOP (BUILDING 123)
11	BUILDING 521, POWER PLANT AREA
12	DISPOSAL TRENCH
13	OLD COMMISSARY SITE
14	OILY LIQUID WASTE DISPOSAL SITE
15	OILY WASTE PONDS AND INCINERATION TANK
17	DRUM STORAGE AND DISPOSAL SITE
20	BUILDING 156
22	SOUTH PIER AREA

CAD File Name:LOCMAP7 Last Plot Date: 11/20/91

Site Location Map
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

PLATE
1



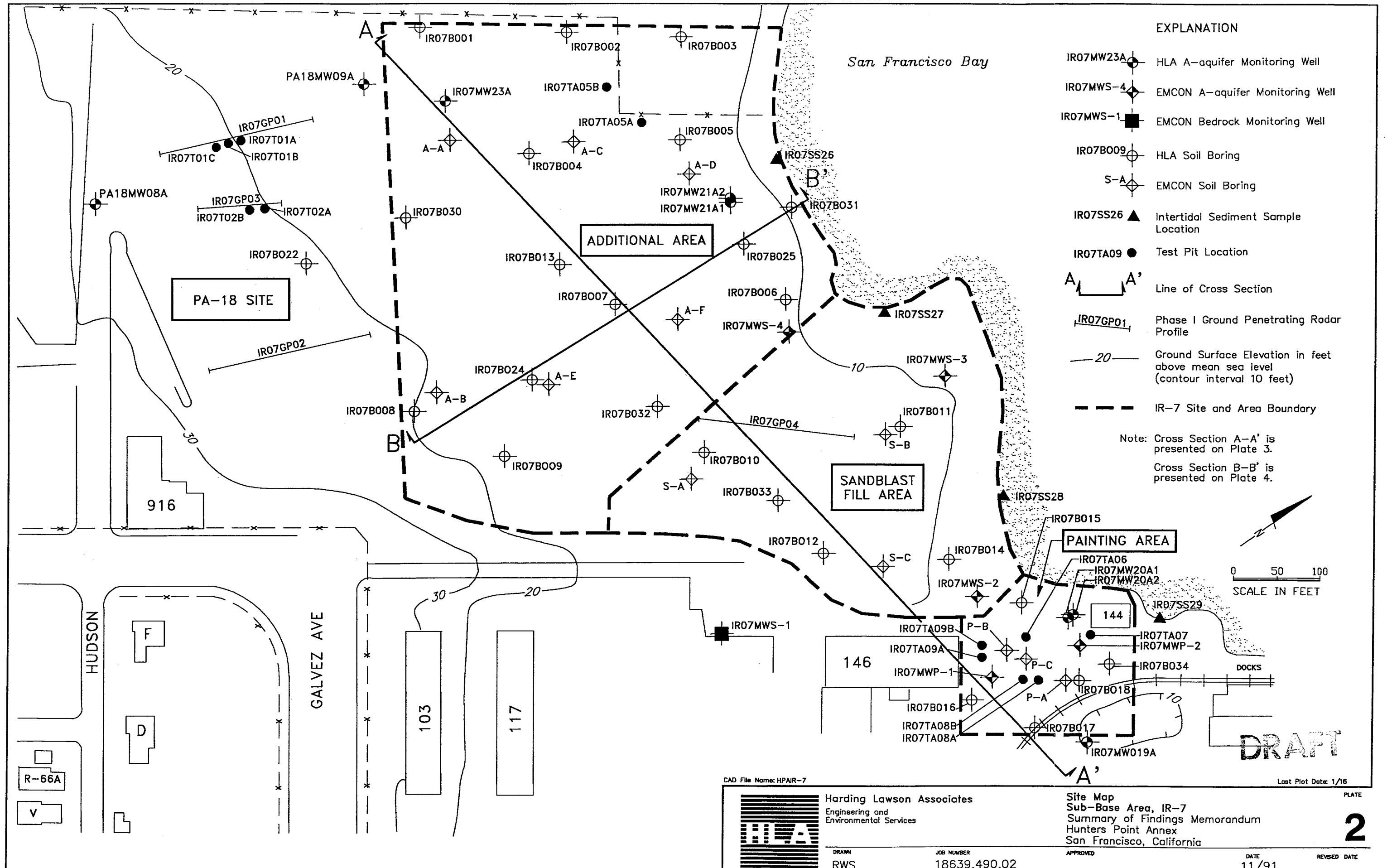
Harding Lawson Associates
Engineering and Environmental Services

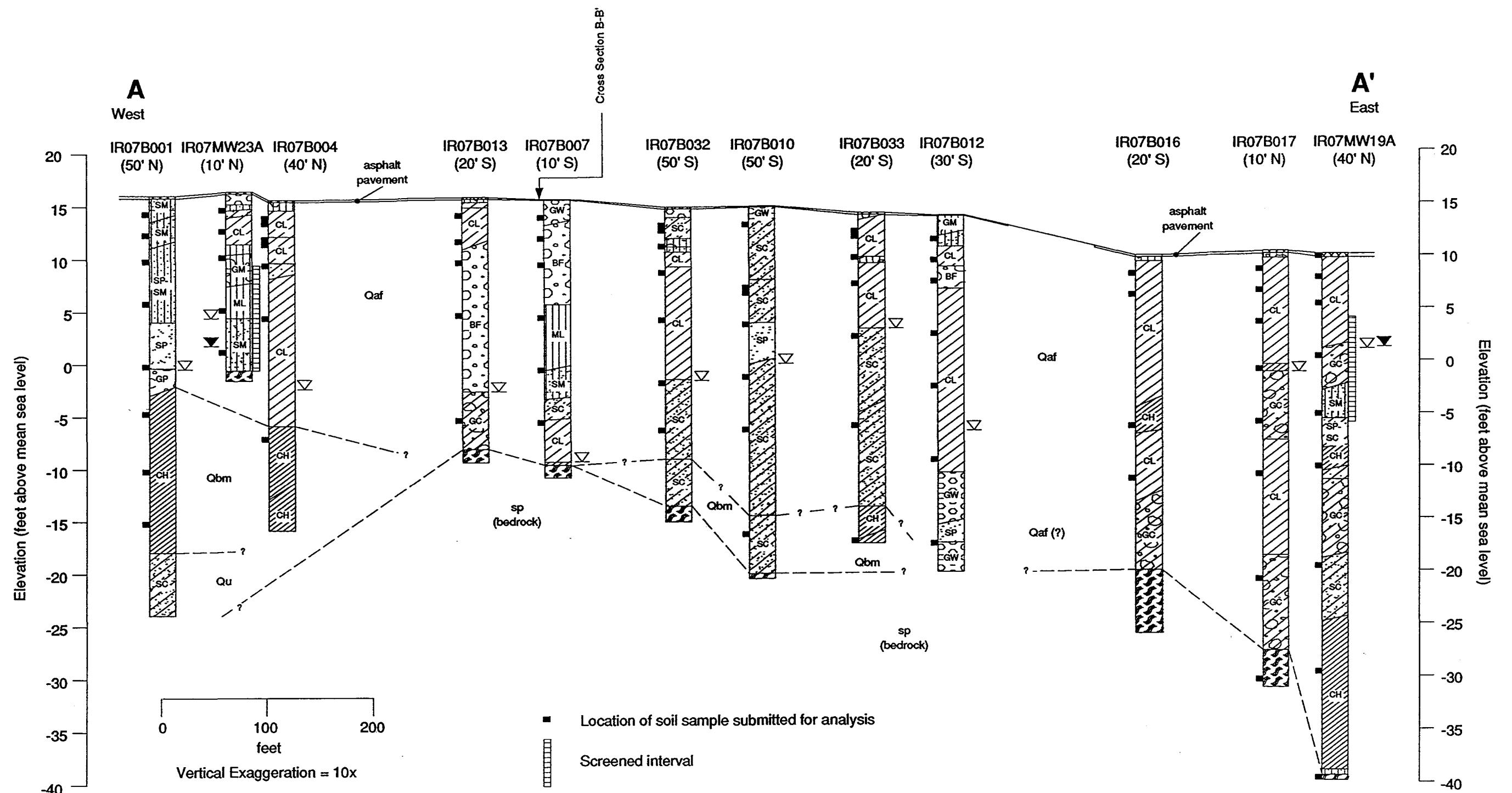
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DATE
11/91

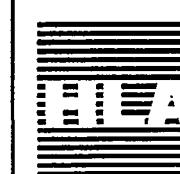
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DRAFT

NOTE: This cross section presents one current interpretation based on review of detailed boring logs.



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**Cross Section A-A'
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California**

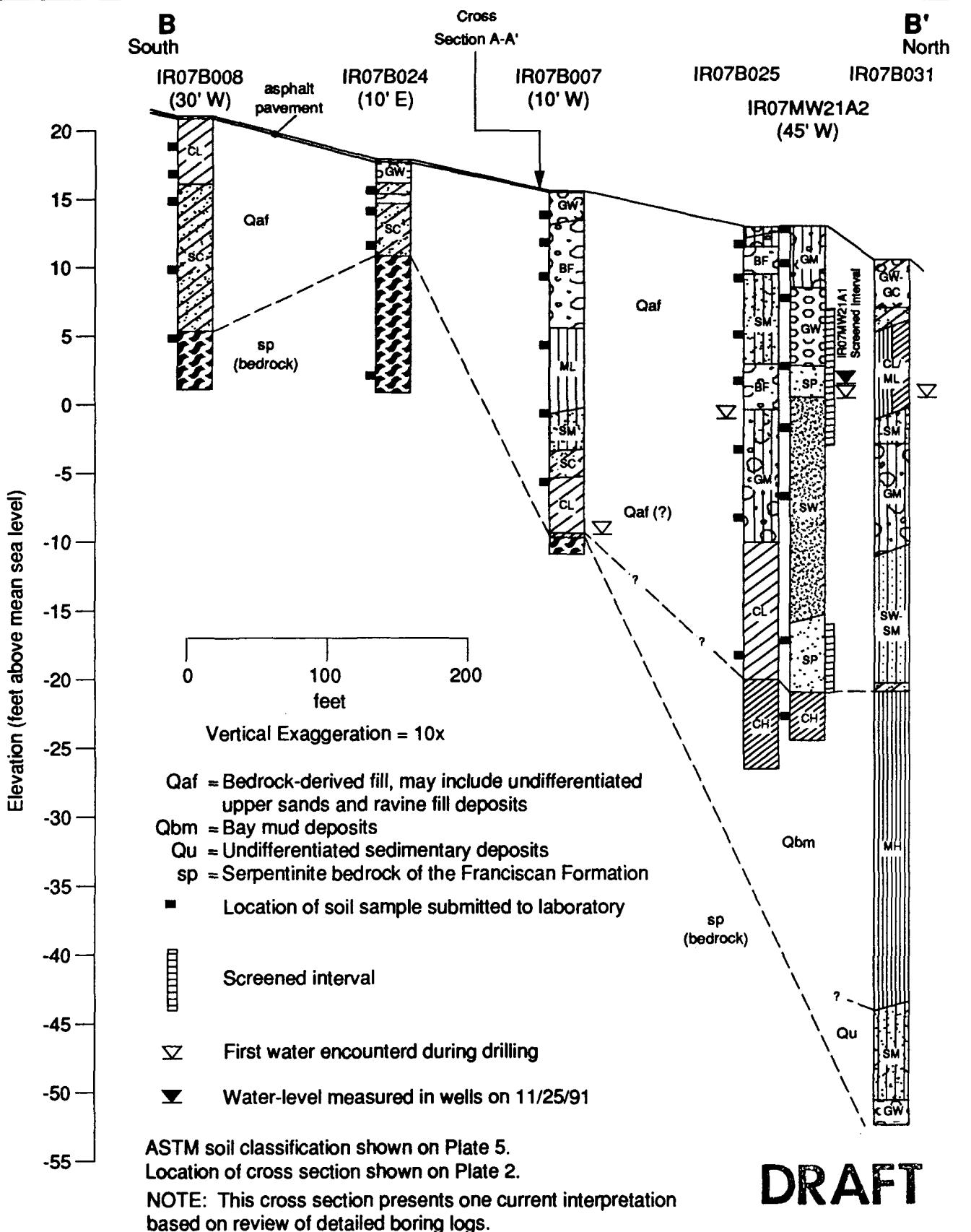
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PLATE

3



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DRAWN
DLFC

JOB NUMBER
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Cross Section B-B'
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

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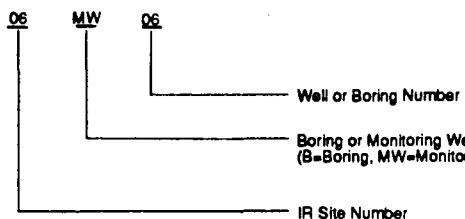
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PLATE
4

MAJOR DIVISIONS			TYPICAL NAMES	
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH C SIZE FINES	GW	WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES.
			GP	Poorly graded gravels with or without sand, little or no fines.
		GRAVELS WITH S-15X FINES	GW-CC	WELL GRADED GRAVELS WITH CLAY, WITH OR WITHOUT SAND.
			GP-CC	Poorly graded gravels with clay, with or without sand.
			GW-GM	WELL GRADED GRAVELS WITH SILT, WITH OR WITHOUT SAND.
			GP-GM	Poorly graded gravels with silt, with or without sand.
		GRAVELS WITH OVER 15X FINES	CC	CLAYEY GRAVELS WITH OR WITHOUT SAND
			GM	SILTY GRAVELS WITH OR WITHOUT SAND
		CLEAN SANDS WITH C SIZE FINES	SW	WELL GRADED SANDS WITH OR WITHOUT GRAVEL LITTLE OR NO FINES.
			SP	Poorly graded sands with or without gravel, little or no fines.
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	SANDS WITH S-15X FINES	SW-SC	WELL GRADED SANDS WITH CLAY, WITH OR WITHOUT GRAVEL.
			SP-SC	Poorly graded sands with clay, with or without gravel.
			SW-SM	WELL GRADED SANDS WITH SILT, WITH OR WITHOUT GRAVEL.
			SP-SM	Poorly graded sands with silt, with or without gravel.
		SANDS WITH OVER 15X FINES	SC	CLAYEY SANDS WITH OR WITHOUT GRAVEL
			SM	SILTY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SAND AND GRAVEL, LEAN CLAYS
	ML		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SAND AND GRAVEL
	OL		OL	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (Borderline classification used to indicate the soil does not have field identifiable properties that place the soil in a specific group.)		ML/CL	INORGANIC CLAYEY SILTS, WITH OR WITHOUT SAND AND GRAVEL
	CL/ML		CL/ML	INORGANIC SILTY CLAYS OF LOW TO MEDIUM PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL
	MH/CH		MH/CH	INORGANIC ELASTIC CLAYEY SILTS, WITH OR WITHOUT SAND AND GRAVEL
	CH/MH		CH/MH	INORGANIC SILTY CLAYS OF HIGH PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
	MH		MH	INORGANIC SILTS, MICROSCOPIC OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
	OH		OH	ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
OTHER	BF ¹		BF ¹	PEAT AND OTHER HIGHLY ORGANIC SOILS
	SERPENTINITE BEDROCK		sp ²	SERPENTINITE BEDROCK

1. Not Part of ASTM Classification System
 2. Bonilla, M.G., 1971. Preliminary Geologic Map of the San Francisco South Quadrangle and Part
 of the Hunters Point Quadrangle, California, USGS Miscellaneous Field Studies Map MF-311, 1:24,000.

KEY TO BOREHOLE NUMBERING SYSTEM



KEY TO SOIL SAMPLE NUMBERING SYSTEM

9133M156	Sample Submitted for Chemical Testing
9132H856-P	Sample Submitted for Physical Testing

DRAFT

PLATE

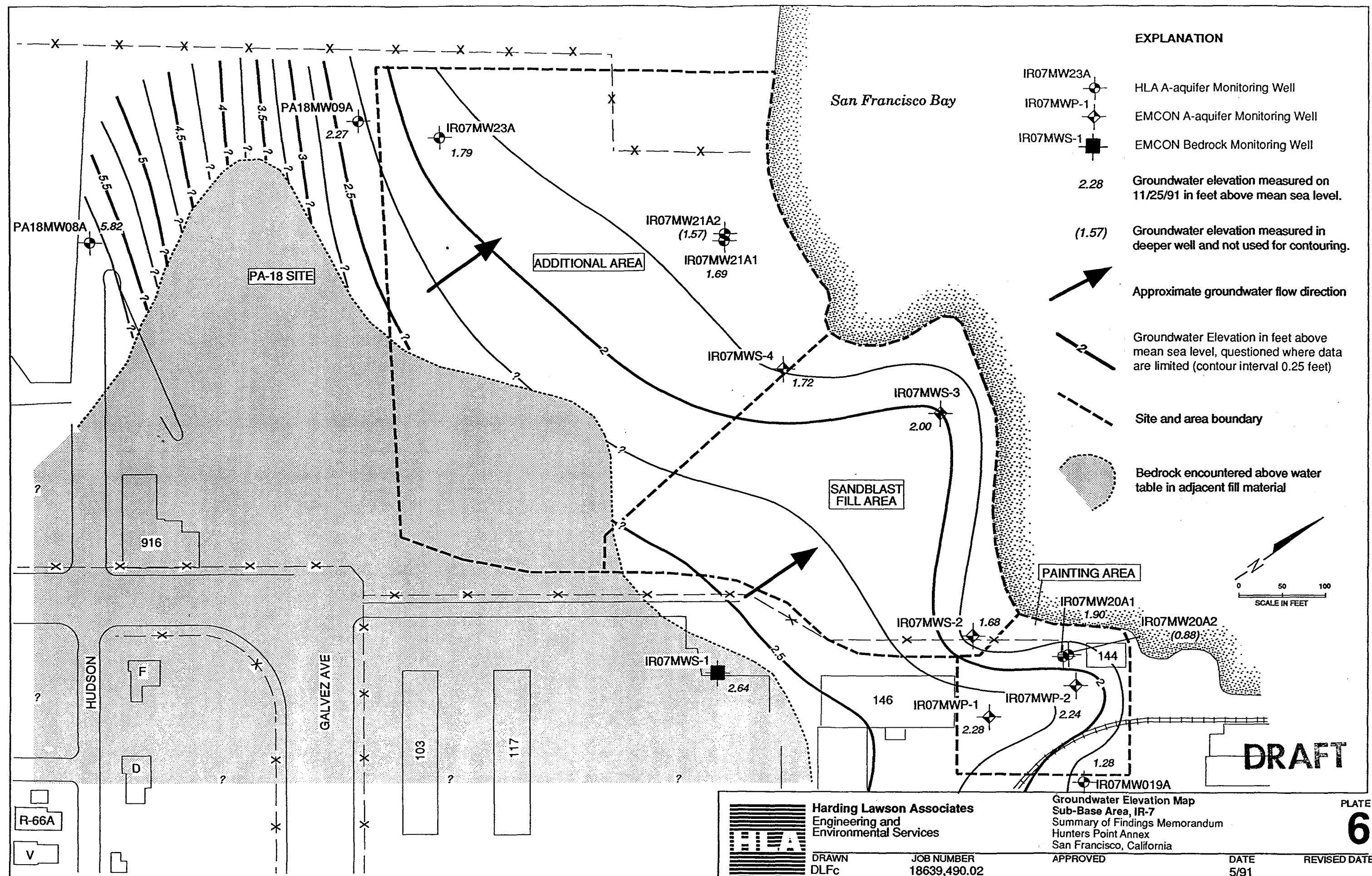
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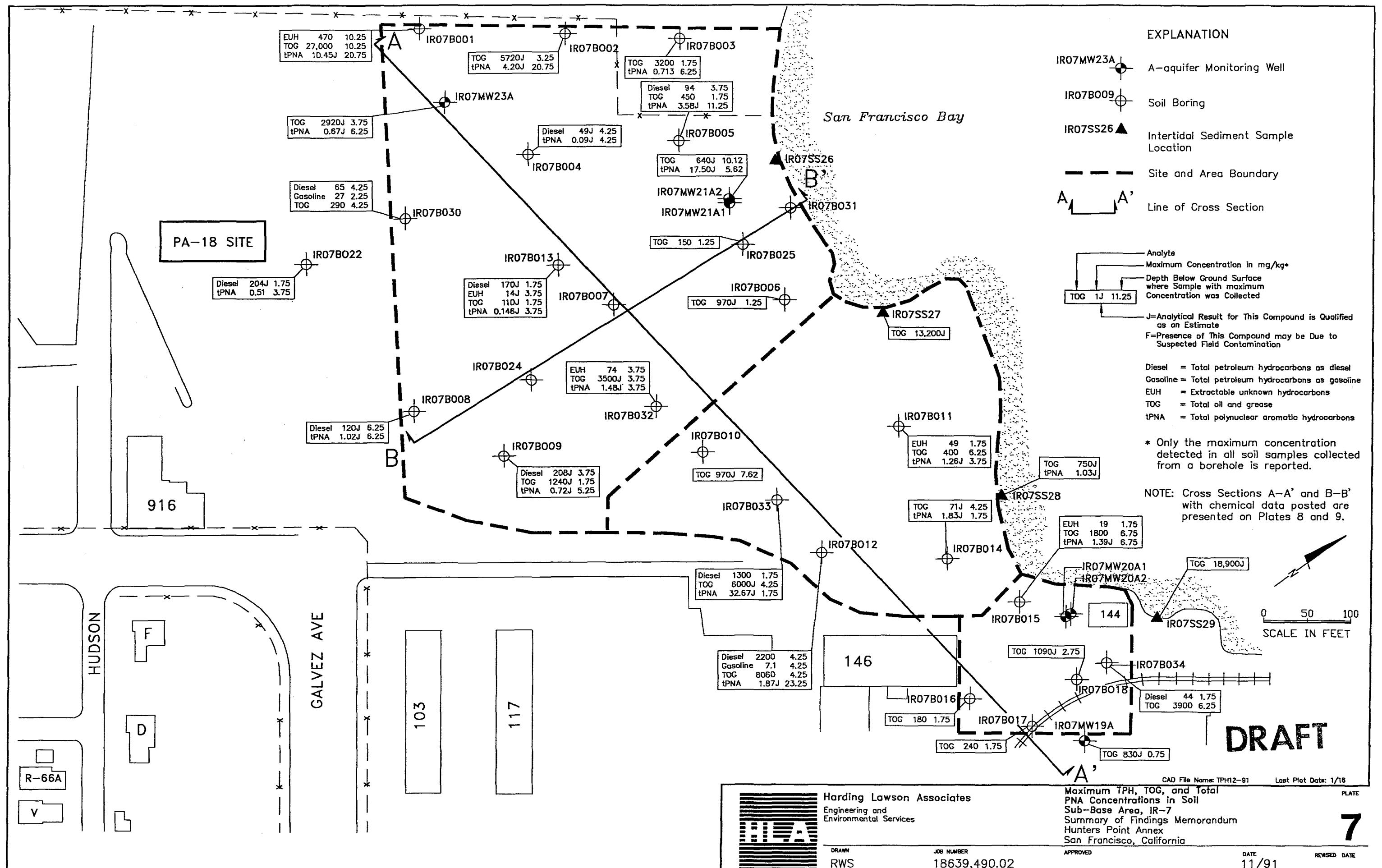


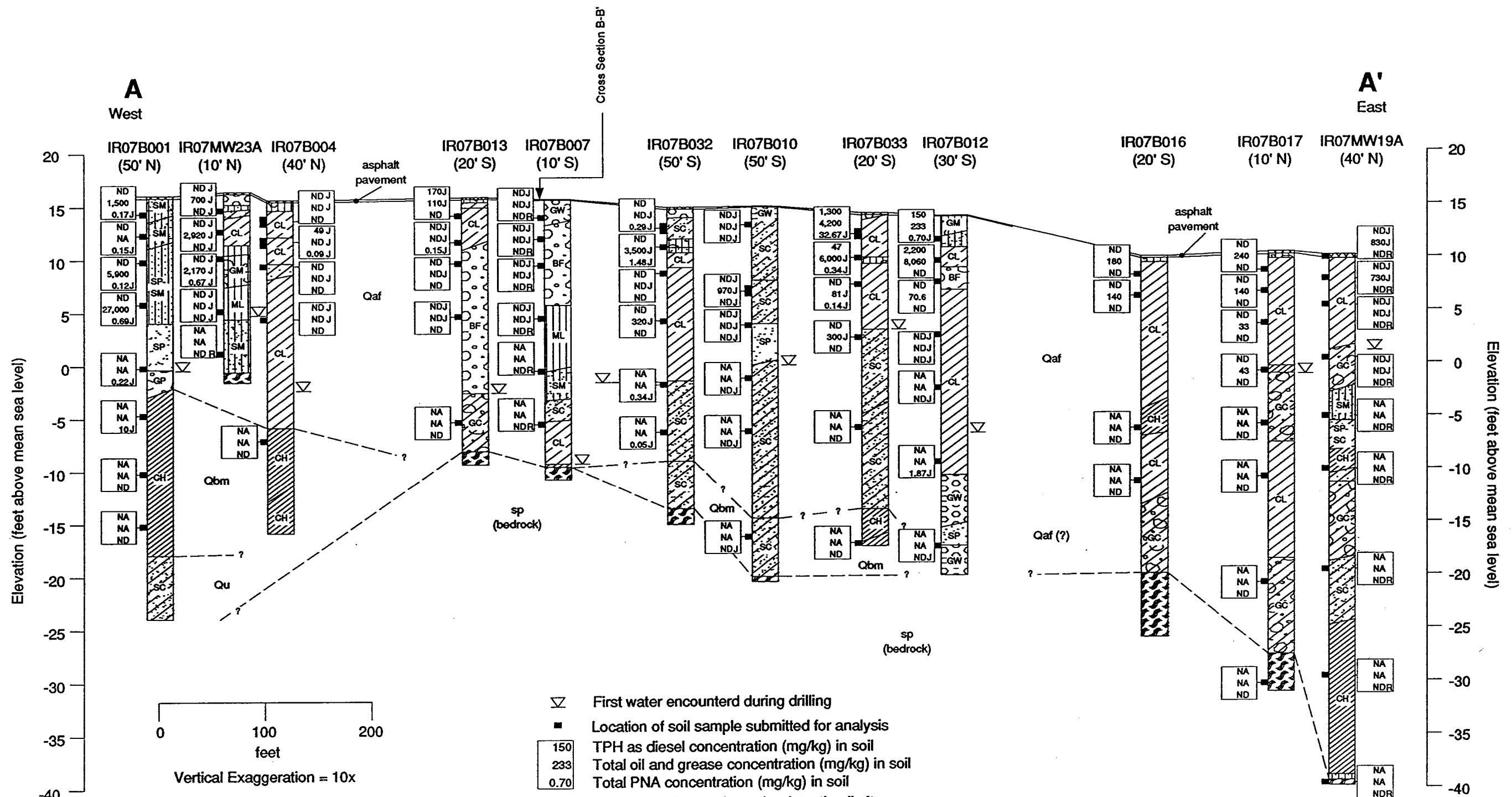
Harding Lawson Associates
 Engineering and
 Environmental Services

Soil Classification Chart
 Sub-Base Area, IR-7
 Summary of Findings Memorandum
 Hunters Point Annex
 San Francisco, California

DRAWN PG	JOB NUMBER 18639,490.02	APPROVED	DATE 12/91	REVISED DATE 01/92
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Qaf = Bedrock-derived fill, may include undifferentiated upper sands and ravine fill deposits

Qbm = Bay mud deposit

Qu = Undifferentiated sedimentary deposit

Qu = Undifferentiated sedimentary deposits
sp = Serpentinite bedrock of the Franciscan Formation

ASTM soil classification shown on Plate 5

Location of cross section shown on Plate 2

NOTE: This cross section presents one current interpretation based on review of detailed boring logs.

NOTE: This cross section presents one current interpretation

NOTE: THIS cross section



**Harding Lawson Associate
Engineering and
Environmental Services**

**Cross Section A-A' Showing TPH as Diesel,
TOG, and Total PNA Concentrations in Soil
Sub-Base Area, IR-7**
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

DRAWN	JOB NUMBER
DLFc	18639,490.0

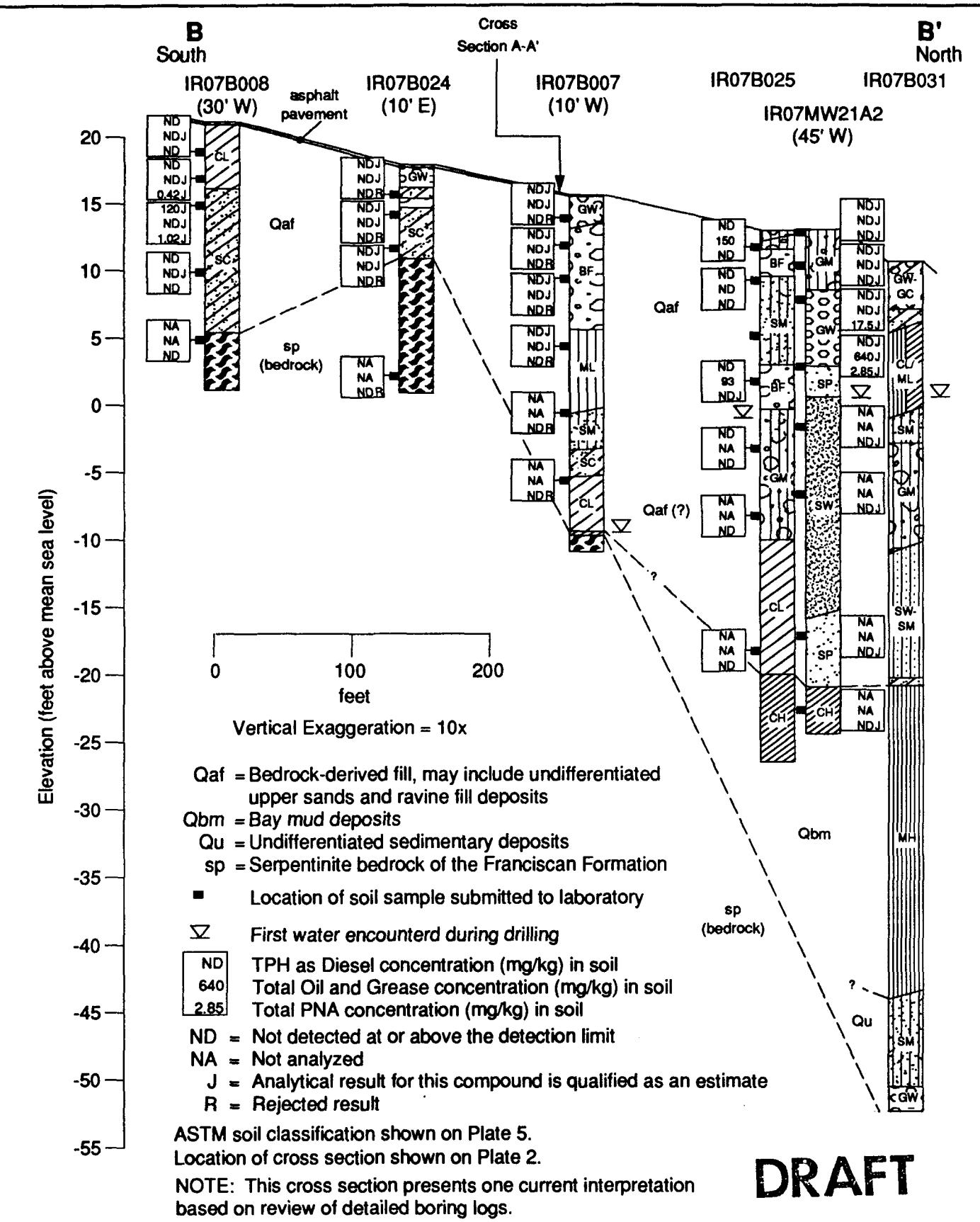
APPROVED

JOB NUMBER
18639,490

APPROVED	DATE	REVISED DATE
	1/92	

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8



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DLFc

JOB NUMBER
18639,490.02

Cross Section B-B' Showing TPH as Diesel,
TOG, and Total PNA Concentrations In Soil
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

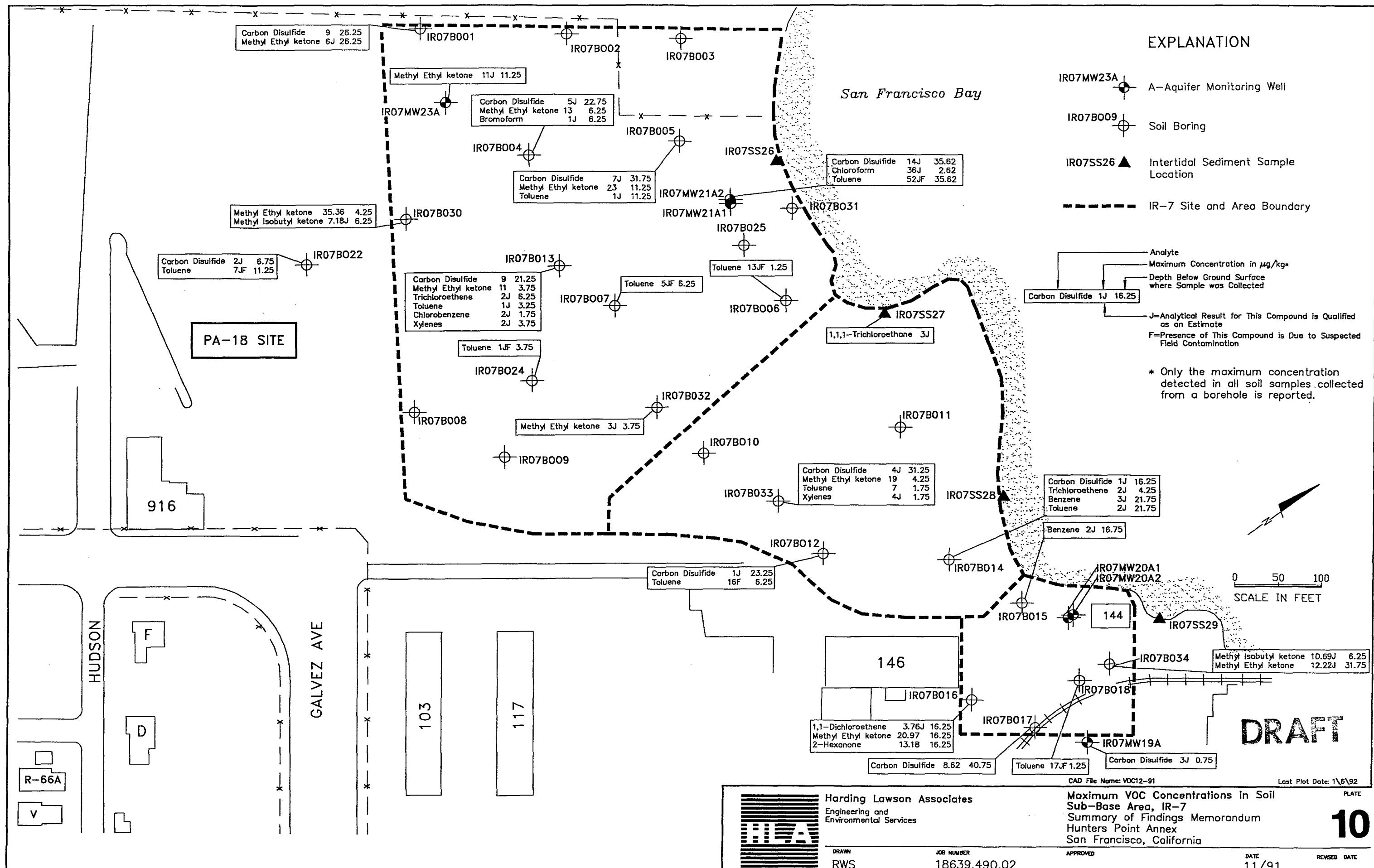
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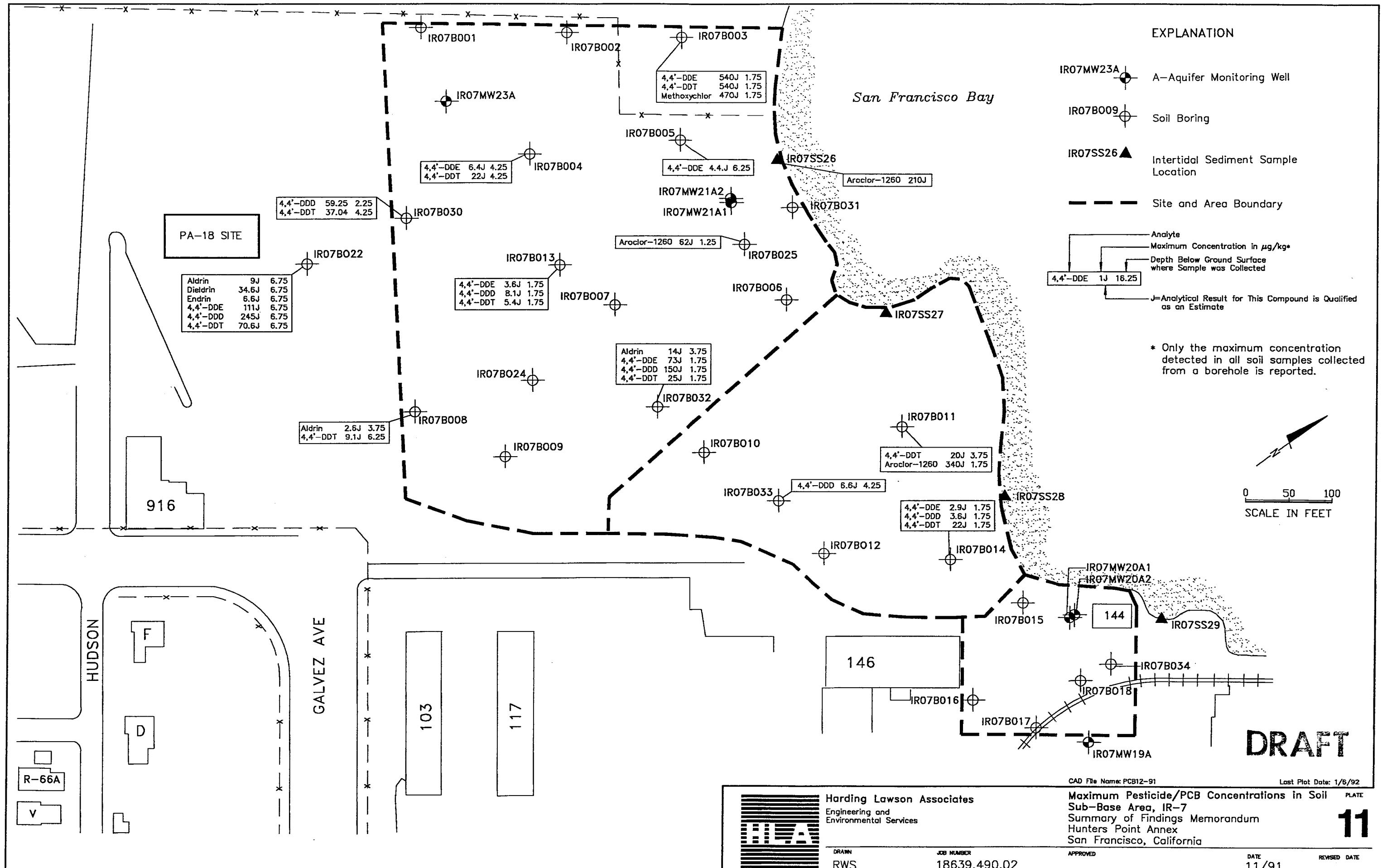
DATE
1/92

PLATE

9

REVISED DATE





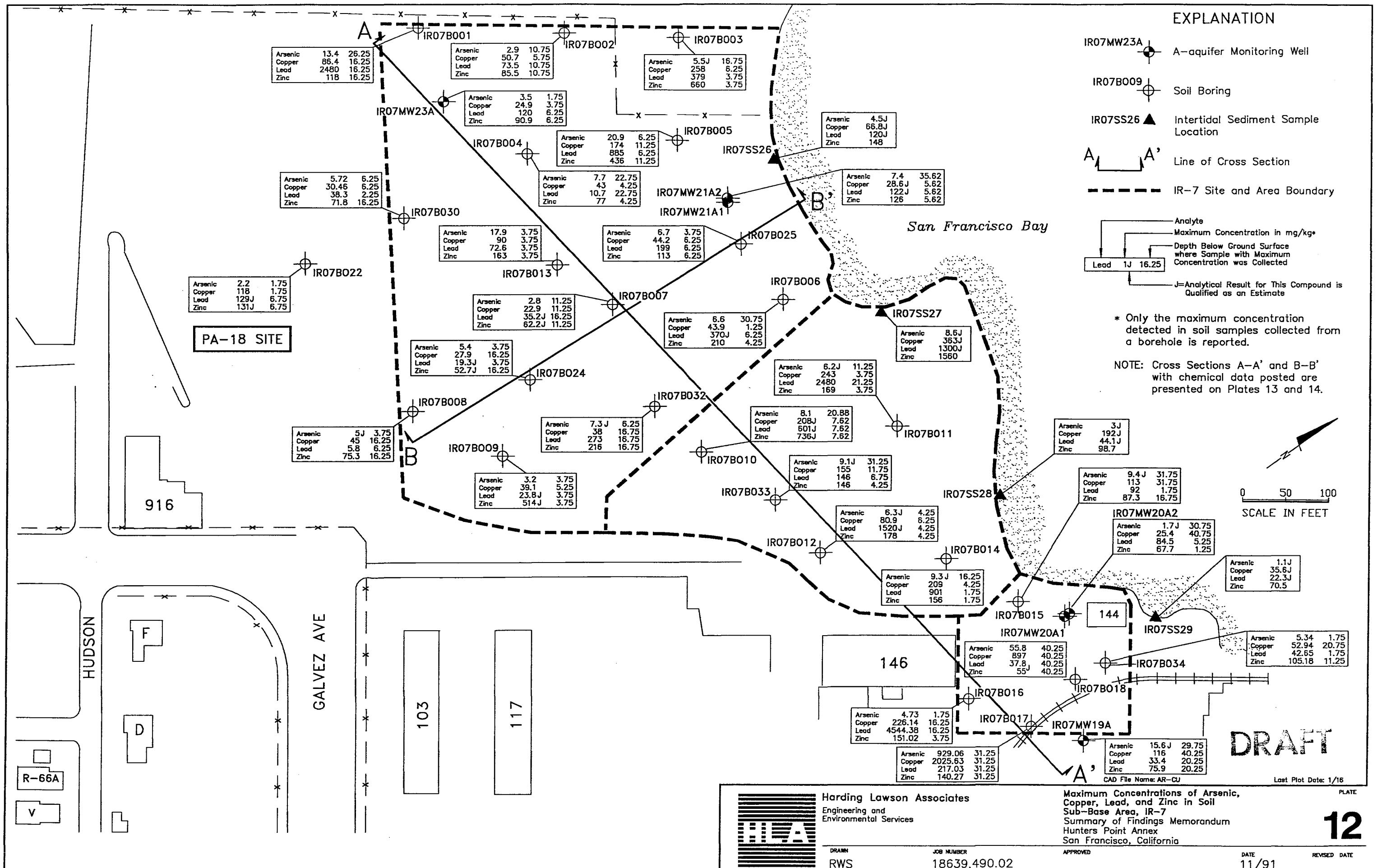
EXPLANATION

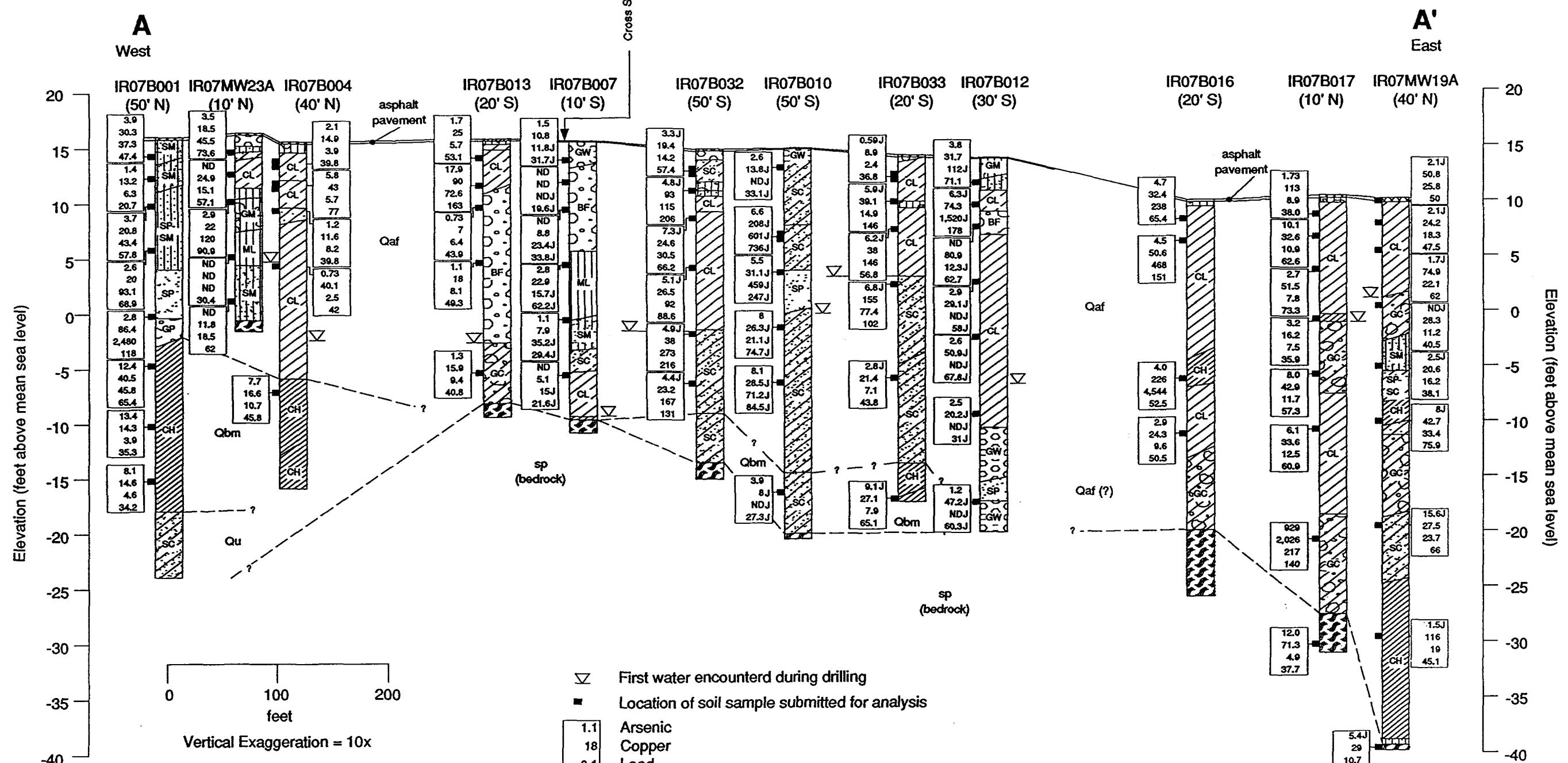
IR07MW23A	A-aquifer Monitoring Well
IR07B009	Soil Boring
IR07SS26	Intertidal Sediment Sample Location
A A'	Line of Cross Section
- - -	IR-7 Site and Area Boundary
Analyte	
Lead	Maximum Concentration in mg/kg*
1J	Depth Below Ground Surface where Sample with Maximum Concentration was Collected
J=	Analytical Result for This Compound is Qualified as an Estimate

* Only the maximum concentration detected in soil samples collected from a borehole is reported.

NOTE: Cross Sections A-A' and B-B' with chemical data posted are presented on Plates 13 and 14.

0 50 100
SCALE IN FEET





Qaf = Bedrock-derived fill, may include undifferentiated upper sands and ravine fill deposits

Qbm = Bay mud deposits

Qu = Undifferentiated sedimentary deposits

sp = Serpentinite bedrock of the Franciscan Formation

ASTM soil classification shown on Plate 5.

Location of cross section shown on Plate 2.

NOTE: This cross section presents one current interpretation based on review of detailed boring logs.

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DLFc JOB NUMBER
18639,490.02

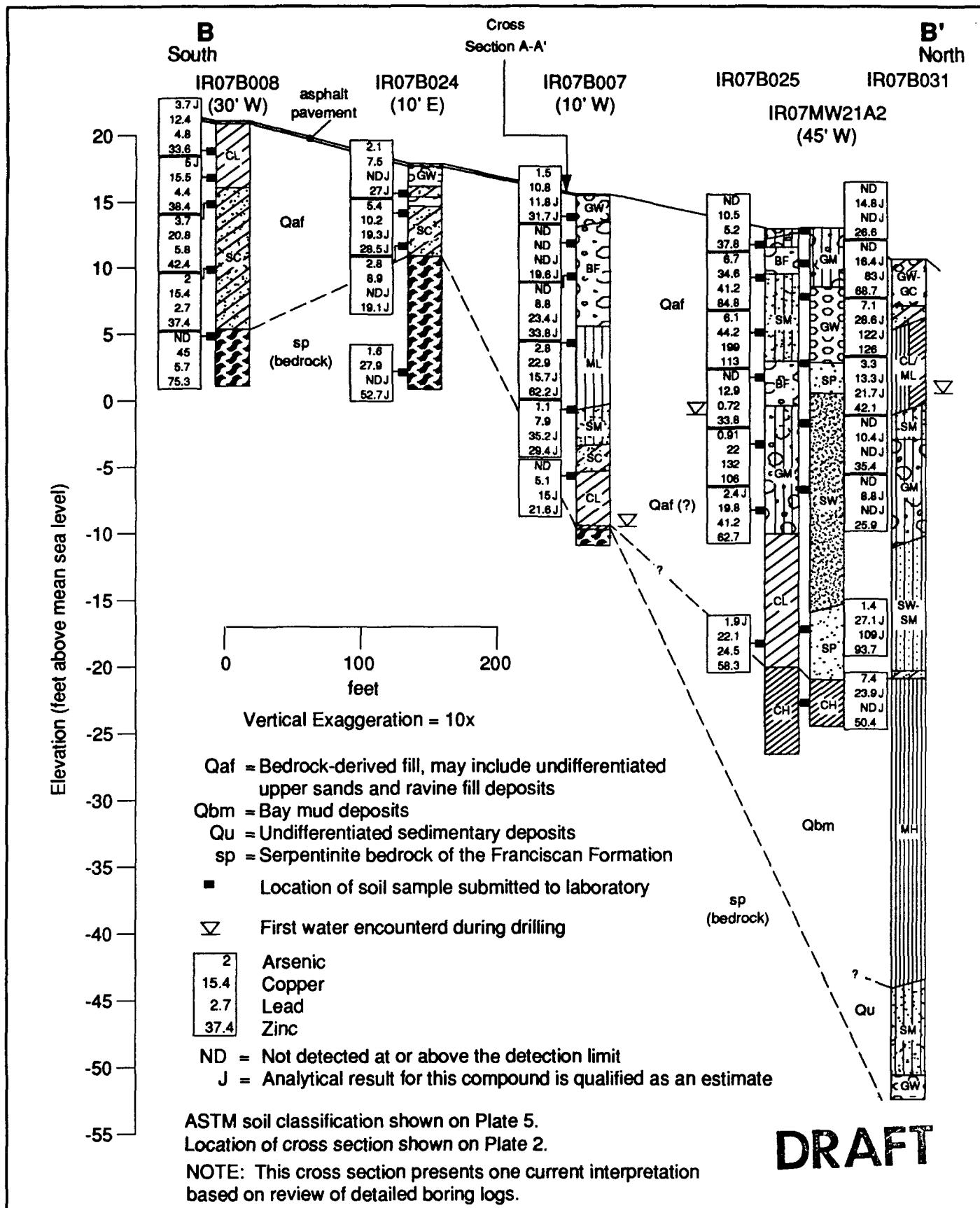
Cross Section A-A' Showing Arsenic, Copper, Lead,
and Zinc Concentrations In Soil
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

APPROVED

DATE
1/92

13

REVISED DATE



Harding Lawson Associates
 Engineering and
 Environmental Services

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JOB NUMBER
18639,490.02

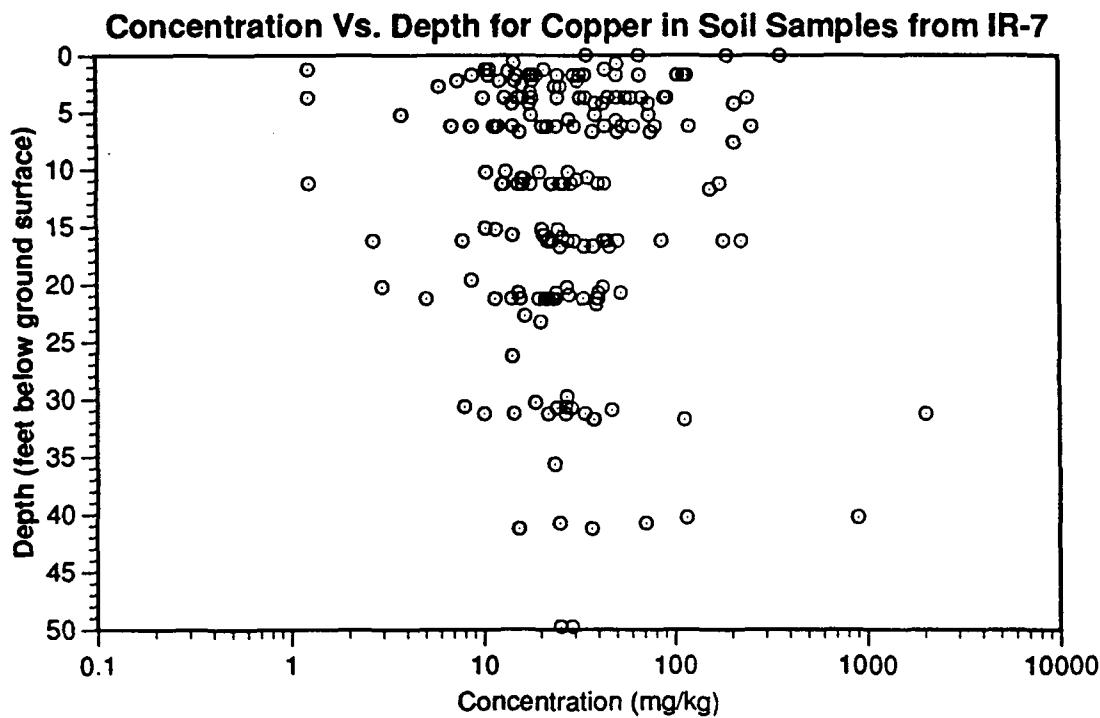
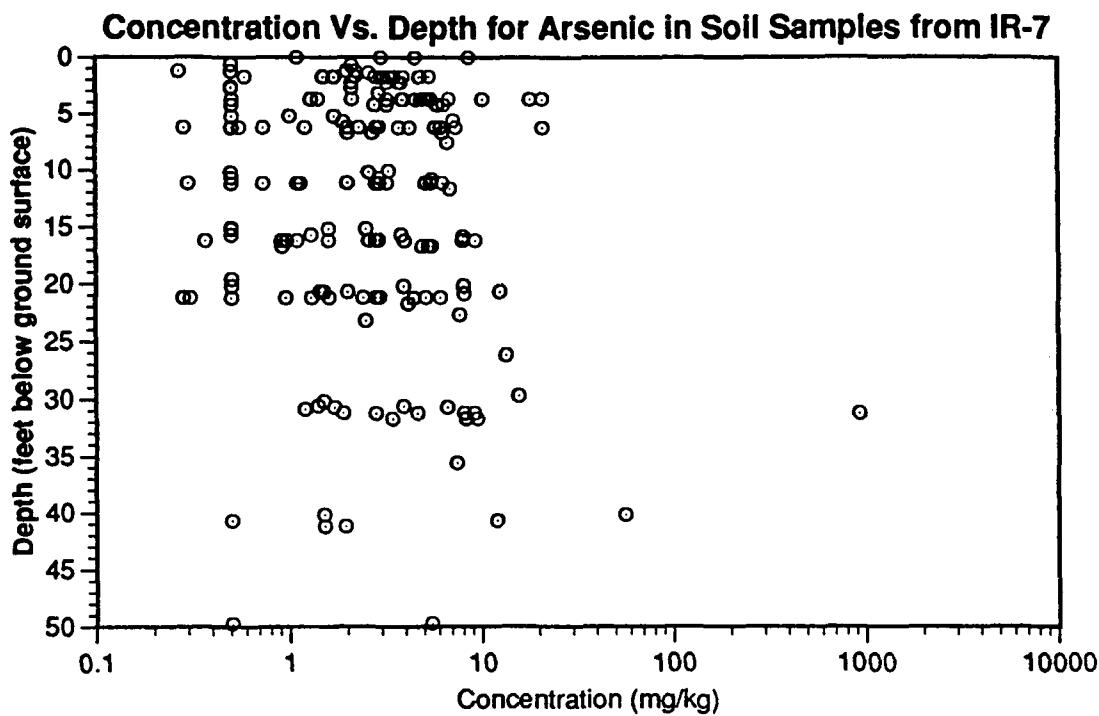
Cross Section B-B' Showing Arsenic, Copper, Lead, PLATE
 and Zinc Concentrations In Soil
 Sub-Base Area, IR-7
 Summary of Findings Memorandum
 Hunters Point Annex
 San Francisco, California

APPROVED

DATE
1/92

14

REVISED DATE



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Environmental Services

Arsenic and Copper Concentrations in Soil versus Depth
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

PLATE

15

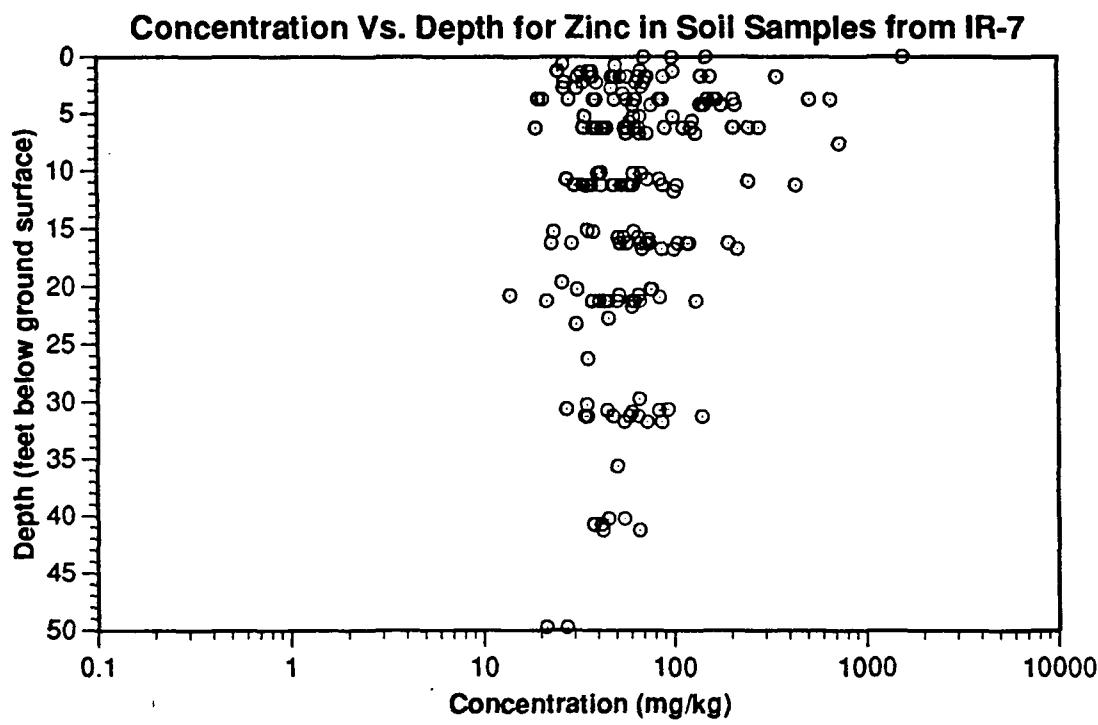
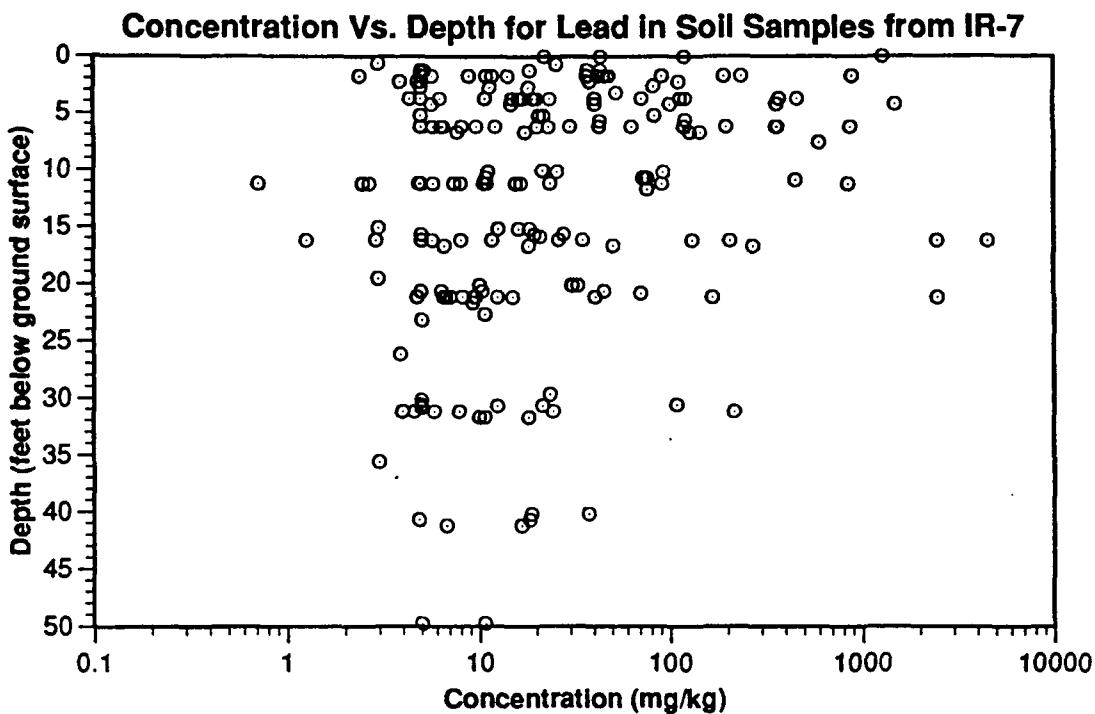
DRAWN
DLFc

JOB NUMBER
18639,490.02

APPROVED

DATE
1/92

REVISED DATE



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Harding Lawson Associates
Engineering and
Environmental Services

Lead and Zinc Concentrations in Soil versus Depth
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

PLATE

16

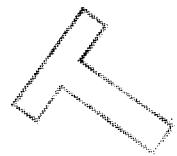
DRAWN
DLFc

JOB NUMBER
18639,490.02

APPROVED

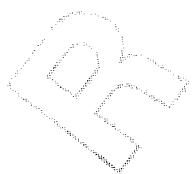
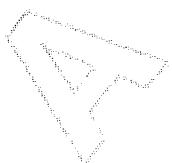
DATE
1/92

REVISED DATE



Appendix A

GEOLOGIC UNITS AT HUNTERS POINT



APPENDIX A

Hunters Point Geology

The following list is a description of the geologic units that have been identified at Hunters Point. These descriptions are based on visual observations and the references listed. The units presented below should be used as working standards for the entire site, subject to changes as the investigation continues.

In general, the stratigraphic sequence in which these units are found, from top to bottom, is as follows: artificial fill (Qaf) slope debris or ravine fill (Qsr); undifferentiated upper sands (Quus); Bay mud deposits (Qbm); undifferentiated sedimentary deposits (Qu); and Franciscan Assemblage (bedrock).

Artificial Fill (Qaf)

Bedrock-Derived Fill:

Predominantly Franciscan-derived gravel- to boulder-sized material within a sand and/or clay matrix. Serpentinite is the dominant rock type, with minor amounts of chert, greenstone, shale, and graywacke. In some areas the bedrock-derived material may be mixed with fat "Bay mud" clays. The fill varies in color and size of material and is loose to very dense. It may also include ravine fill deposits, which cannot be easily distinguished from bedrock-derived fill. Thicknesses range from 0-50 feet.

Found at IR07.

Ref: Lowney-Kaldveer, 1972
HLA, 1988
HLA, 1990a
WESTEC, 1984

Industrial Fill:

Metal debris, processed wood fragments, bricks, concrete, and sandblast material; oily wastes and solvents have also been reported. Household refuse and cloth are present in the industrial fill. The materials are usually incorporated in a silty sand. Gravel- and boulder-sized Franciscan-derived material is often present.

Generally not found at IR-7; however, occasionally wood and brick fragments were found with bedrock-derived fill. Also, sandblast material has been reportedly dumped at IR07; however, these deposits have not been positively identified onsite.

Ref: HLA, 1988
WESTEC, 1984

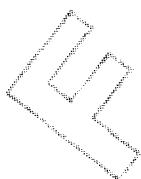


Recently Imported Backfill Material:

Poorly graded, very fine- to fine-grained sand with fine to coarse angular gravel, occasionally well-graded fine- to coarse-grained sand with gravel. Brown, olive, and brownish yellow in color; loose to dense. Thicknesses range from 3-6 feet.

Not found at IR07.

Ref: HLA, 1990b

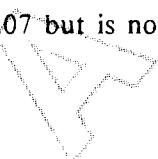


Slope Debris and Ravine Fill (Qsr):

Consists of gravelly, sandy, and silty clay; locally clayey sand and gravel; yellowish orange to medium gray color. Deposits were mapped in upland areas of HPA in the 1920s.

May be present in Painting Area of IR07 but is not distinguishable from bedrock-derived fill.

Ref: Bonilla, 1971
HLA, 1990a



Undifferentiated Upper Sands (Quus):

Poorly graded, very fine- to medium-grained sand, occasionally with silt to silty. Very dark gray to dark greenish gray and olive in color; trace to few shell fragments; very loose to medium dense. Origin is uncertain. May be from dredging operations ("hydraulic fill"), or, in some areas, it may be native. Ranges in thickness from 0-60 feet.

May be present at IR07, but has not been identified.

Ref: Lowney-Kaldveer, 1972
HLA, 1990b

Bay Mud Deposits (Qbm):

Silt and clay; dark greenish gray to dark gray, soft, highly plastic, with occasional peat and sand to clayey sand lenses, trace to abundant shell fragments. May have H₂S odor. Strength and density may be greater than expected due to consolidation from placement of fill on top of the Bay mud. Thicknesses range from 0-50 feet.

Found at IR07.

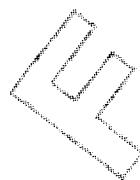
Ref: Lowney-Kaldveer, 1972
WESTEC, 1984
HLA, 1988
HLA, 1990a

Undifferentiated Sedimentary Deposits (Qu):



Poorly graded sand, silty sand, and gravel, interbedded with lean clay and silt that is stiff to very stiff. Greenish gray to olive and brown in color. May include sediments that correspond to the Colma Formation and "older Bay muds," which are distinguished from younger Bay muds by consistency (increased stiffness) and decreased moisture content. Thicknesses range from 0-220 feet.

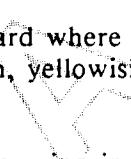
Found at IR07.



Ref: Lowney-Kaldveer, 1972
HLA, 1988
Bonilla, 1971

Franciscan Assemblage (Bedrock):

[KJs and KJsk] Sandstone and shale; hard where fresh; soft where weathered or sheared. Color is medium dark gray where fresh, yellowish brown to yellowish orange where weathered.



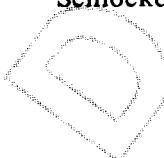
[KJc] Chert with interbedded shale, occurring in thin to medium beds alternating with thin beds of shale, generally grayish red. Fractures are numerous in thin-bedded chert.

[KJg] Greenstone, dark gray to greenish gray where fresh; commonly grayish olive to olive gray where moderately weathered; hard where fresh; generally closely fractured.

[sp] Serpentinite, greenish gray; may contain small bodies of gabbro and diabase; soft where exposed and weathered; moderately fractured to crushed in places.

Found at IR07.

Ref: Bonilla, 1971
Schlocker, 1974

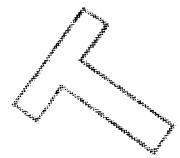


References:

- Bonilla, M.G., 1971. *Preliminary Geologic Map of the San Francisco South Quadrangle and Part of the Hunters Point Quadrangle, California.* United States Geological Survey Miscellaneous Field Studies Map MF-311, 1:24,000.
- Harding Lawson Associates, 1988. *Scoping Document, Remedial Investigation/Feasibility Study, Naval Station, Treasure Island, Hunters Point Annex.*
- _____, 1990a. *Reconnaissance Activities Report, Remedial Investigation/Feasibility Study, Naval Station, Treasure Island, Hunters Point Annex.*
- _____, 1990b. *Interim Report, Phase I, Primary Remedial Investigation, Building 503, PCB Spill Area (IR-8), Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California.*
- Lowney-Kaldveer Associates, 1972. *Foundation Investigation, Water Pollution Abatement Facilities, Hunters Point Naval Shipyard.*
- Schlocker, J., 1974. *Geology of the San Francisco North Quadrangle, California.* Geological Survey Professional Paper 782.
- WESTEC Services, Inc., 1984. *Initial Assessment Study, Hunters Point Naval Shipyard (Disestablished), San Francisco, California.*

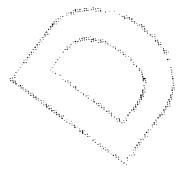
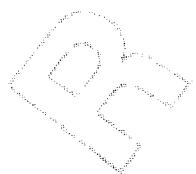
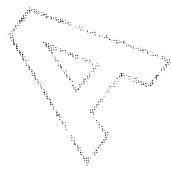
Additional References:

- Blake, M.C., Jr., et al, 1974. *Preliminary Geologic Map of Marin and San Francisco Counties and Parts of Alameda, Contra Costa, and Sonoma Counties, California.* MFS Map.
- California Division of Mines and Geology, 1969. *Geologic and Engineering Aspects of San Francisco Bay Fill.* Special Report 97.
- Holley, E. J. and K.R. LaJoie, 1979. *Flatland Deposits - Their Geology and Engineering Properties and Their Importance to Comprehensive Planning, Selected Examples from the San Francisco Bay Region, California.* Geological Survey Professional Paper 943.
- Nichols, Donald R. and Nancy A. Wright, 1971. *Preliminary Map of Historic Margins of Marshland, San Francisco Bay, California.* U.S. Geological Survey Open File Report.



Appendix B

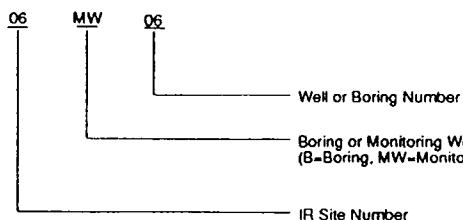
BORING LITHOLOGIC LOGS



MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN No. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE	CLEAN GRAVELS WITH < 5% FINES	GW	○ ○	WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH 5-15% FINES	GP	○ ○ ○ ○	POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 15% FINES	GW-GC	○ ○ ○ ○ ○ ○ ○ ○	WELL GRADED GRAVELS WITH CLAY, WITH OR WITHOUT SAND
			GP-GC	○ ○ ○ ○ ○ ○ ○ ○	POORLY GRADED GRAVELS WITH CLAY, WITH OR WITHOUT SAND
			GW-GM	○ ○ ○ ○ ○ ○ ○ ○	WELL GRADED GRAVELS WITH SILT, WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE	GRAVELS WITH OVER 15% FINES	GP-GM	○ ○ ○ ○ ○ ○ ○ ○	POORLY GRADED GRAVELS WITH SILT, WITH OR WITHOUT SAND
		CLEAN SANDS WITH < 5% FINES	GC	○ ○ ○ ○ ○ ○ ○ ○	CLAYEY GRAVELS WITH OR WITHOUT SAND
		SANDS WITH 5-15% FINES	GM	○ ○ ○ ○ ○ ○ ○ ○	SILTY GRAVELS WITH OR WITHOUT SAND
		SANDS WITH OVER 15% FINES	SW	○ ○ ○ ○ ○ ○ ○ ○	WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP	○ ○ ○ ○ ○ ○ ○ ○	POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
FINE-GRAINED SOILS MORE THAN HALF IS FINE THAN No. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS	SANDS WITH CLAY, WITH OR WITHOUT GRAVEL	SW-SC	○ ○ ○ ○ ○ ○ ○ ○	WELL GRADED SANDS WITH CLAY, WITH OR WITHOUT GRAVEL
		SANDS WITH SILT, WITH OR WITHOUT GRAVEL	SP-SC	○ ○ ○ ○ ○ ○ ○ ○	POORLY GRADED SANDS WITH CLAY, WITH OR WITHOUT GRAVEL
		SANDS WITH SILT, WITH OR WITHOUT GRAVEL	SW-SM	○ ○ ○ ○ ○ ○ ○ ○	WELL GRADED SANDS WITH SILT, WITH OR WITHOUT GRAVEL
			SP-SM	○ ○ ○ ○ ○ ○ ○ ○	POORLY GRADED SANDS WITH SILT, WITH OR WITHOUT GRAVEL
			SC	○ ○ ○ ○ ○ ○ ○ ○	CLAYEY SANDS WITH OR WITHOUT GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		SM	○ ○ ○ ○ ○ ○ ○ ○	SILTY SANDS WITH OR WITHOUT GRAVEL
		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SAND AND GRAVEL, LEAN CLAYS	CL	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SAND AND GRAVEL, LEAN CLAYS
		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SAND AND GRAVEL	ML	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SAND AND GRAVEL
		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY	OL	○	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
		(Borderline classification used to indicate the soil does not have field identifiable properties that place the soil in a specific group.)	ML/CL	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC CLAYEY SILTS, WITH OR WITHOUT SAND AND GRAVEL
OTHER O	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%	INORGANIC SILTY CLAYS OF LOW TO MEDIUM PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL	CL/ML	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC SILTY CLAYS OF LOW TO MEDIUM PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL
		INORGANIC ELASTIC CLAYEY SILTS, WITH OR WITHOUT SAND AND GRAVEL	MH/CH	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC ELASTIC CLAYEY SILTS, WITH OR WITHOUT SAND AND GRAVEL
		INORGANIC SILTY CLAYS OF HIGH PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL	CH/MH	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC SILTY CLAYS OF HIGH PLASTICITY, WITH OR WITHOUT SAND AND GRAVEL
		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	CH	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
		INORGANIC SILTS, INACCESIBLE OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS	MH	○ ○ ○ ○ ○ ○ ○ ○	INORGANIC SILTS, INACCESIBLE OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
	BOULDERS > 50%	ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY	OH	○ ○ ○ ○ ○ ○ ○ ○	ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
	SERPENTINITE BEDROCK	PEAT AND OTHER HIGHLY ORGANIC SOILS	PI	○ ○ ○ ○ ○ ○ ○ ○	PEAT AND OTHER HIGHLY ORGANIC SOILS
		BOULDER FILL WITH OR WITHOUT GRAVEL, SAND, AND FINES	BF ¹	○ ○ ○ ○ ○ ○ ○ ○	BOULDER FILL WITH OR WITHOUT GRAVEL, SAND, AND FINES
		SERPENTINITE BEDROCK	sp ²	○ ○ ○ ○ ○ ○ ○ ○	SERPENTINITE BEDROCK

1. Not Part of ASTM Classification System
 2. Bonilla, M.G., 1971. Preliminary Geologic Map of the San Francisco South Quadrangle and Part
 of the Hunters Point Quadrangle, California, USGS Miscellaneous Field Studies Map MF-311, 1:24,000.

KEY TO BOREHOLE NUMBERING SYSTEM



KEY TO SOIL SAMPLE NUMBERING SYSTEM

9133M156	Sample Submitted for Chemical Testing
9132H856-P	Sample Submitted for Physical Testing



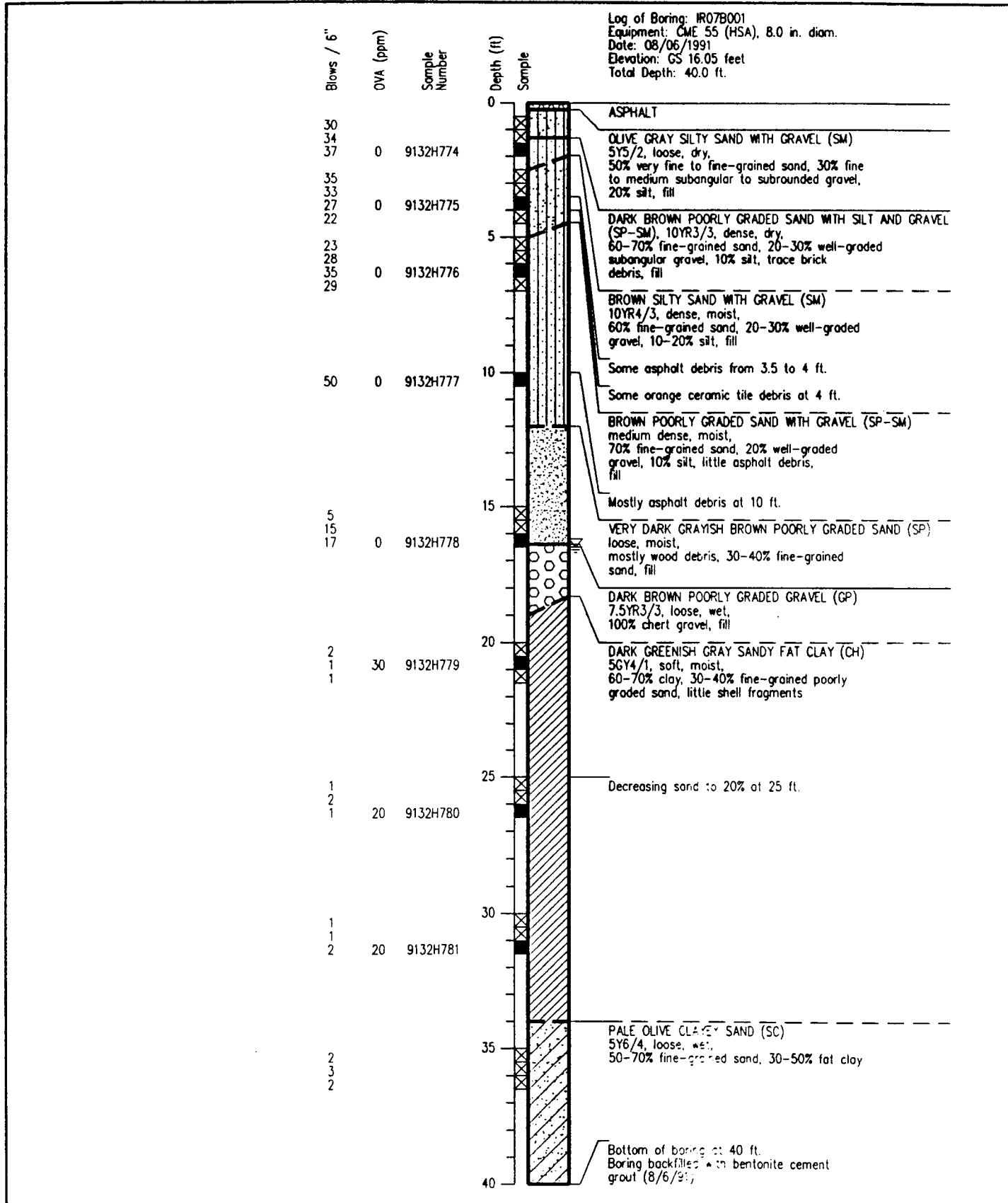
Harding Lawson Associates
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DRAWN JOB NUMBER
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Soil Classification Chart
Sub-Base Area, IR-7
Summary of Findings Memorandum
Hunters Point Annex
San Francisco, California

APPROVED

DATE
12/91REVISED DATE
01/92PLATE
B1



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Log of Boring: IR07B001
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
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PLATE

B2

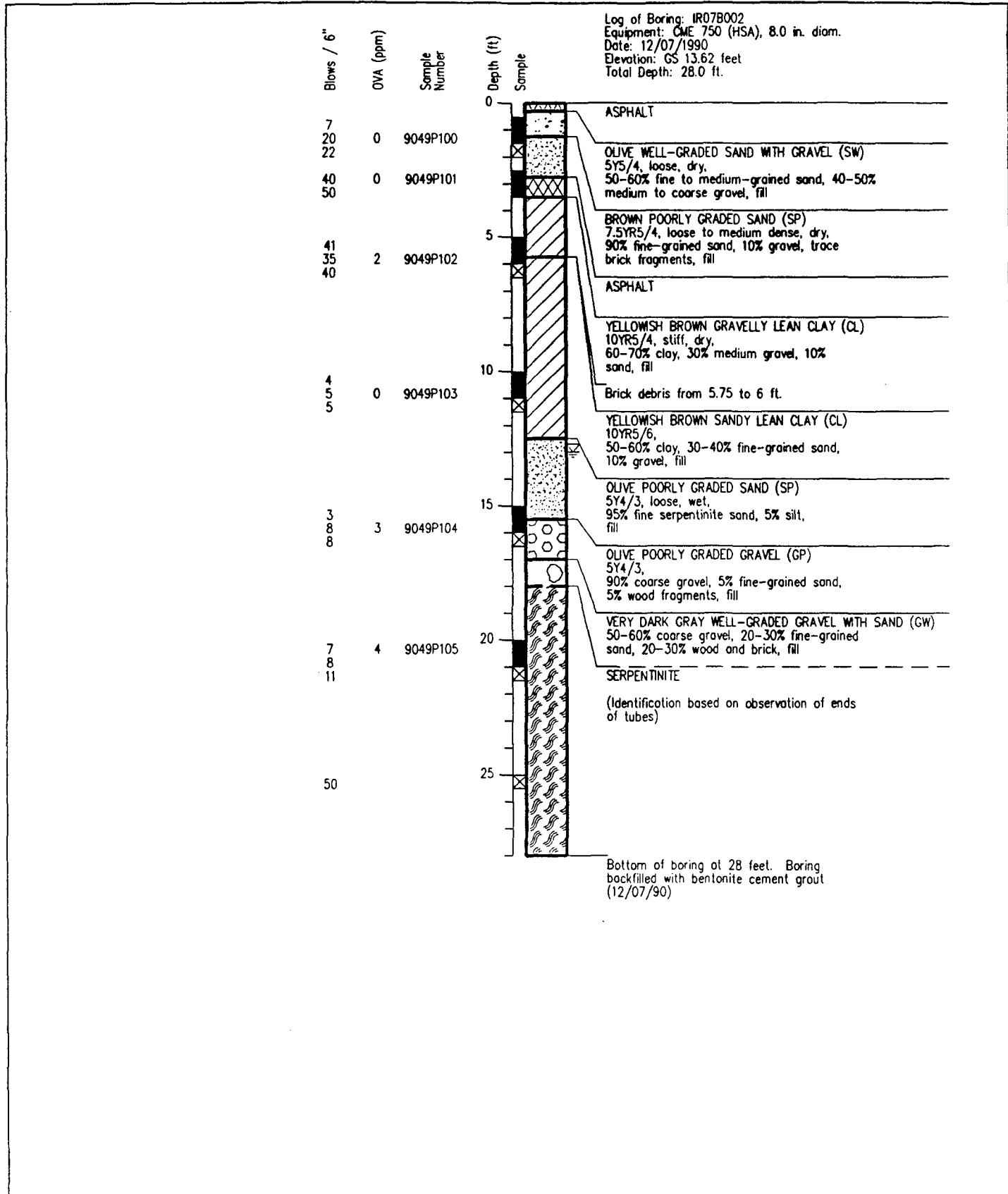
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B002
 Primary Phase Remedial Investigation
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 San Francisco, California

PLATE

B3

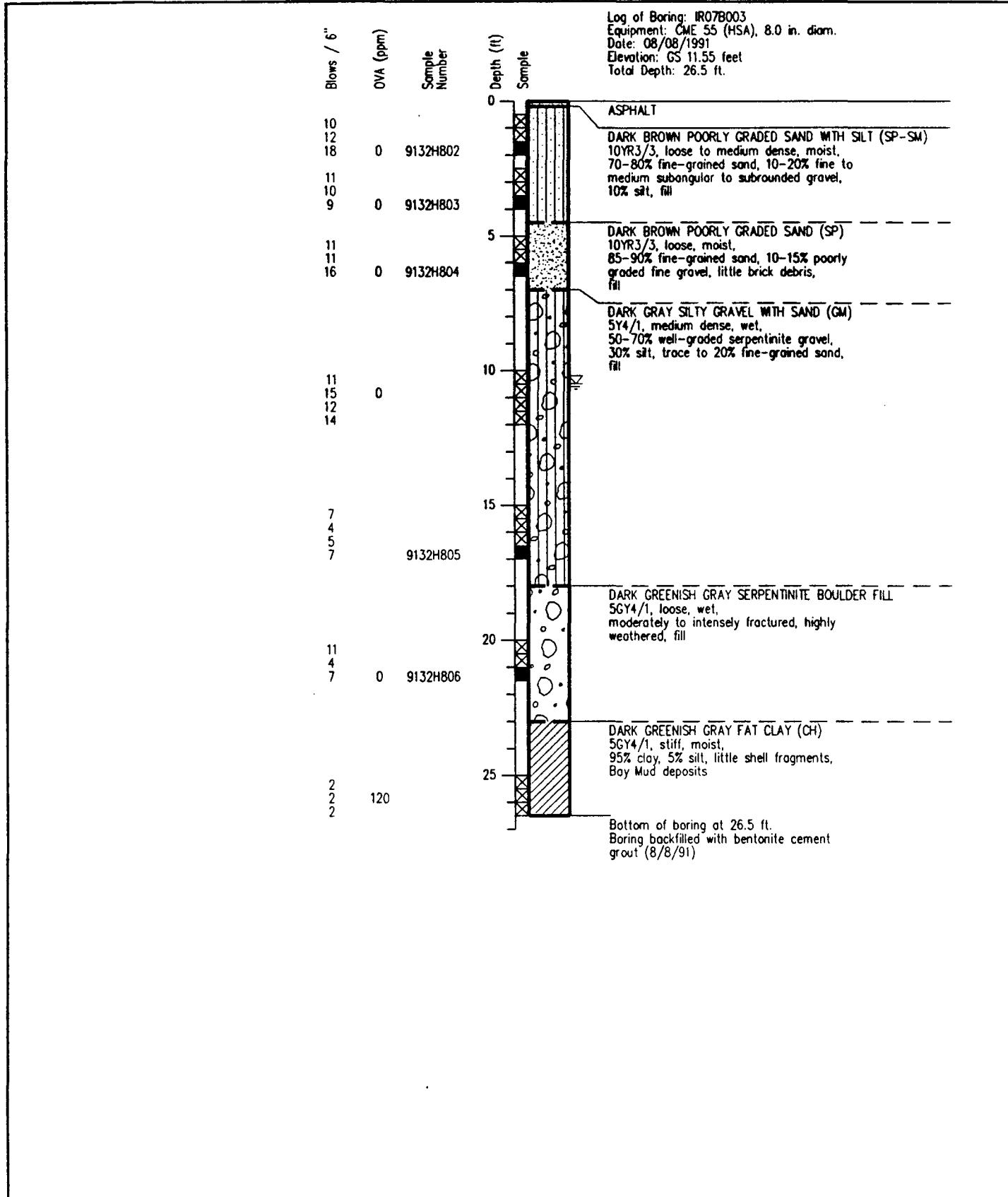
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B003
 Primary Phase Remedial Investigation
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PLATE

B4

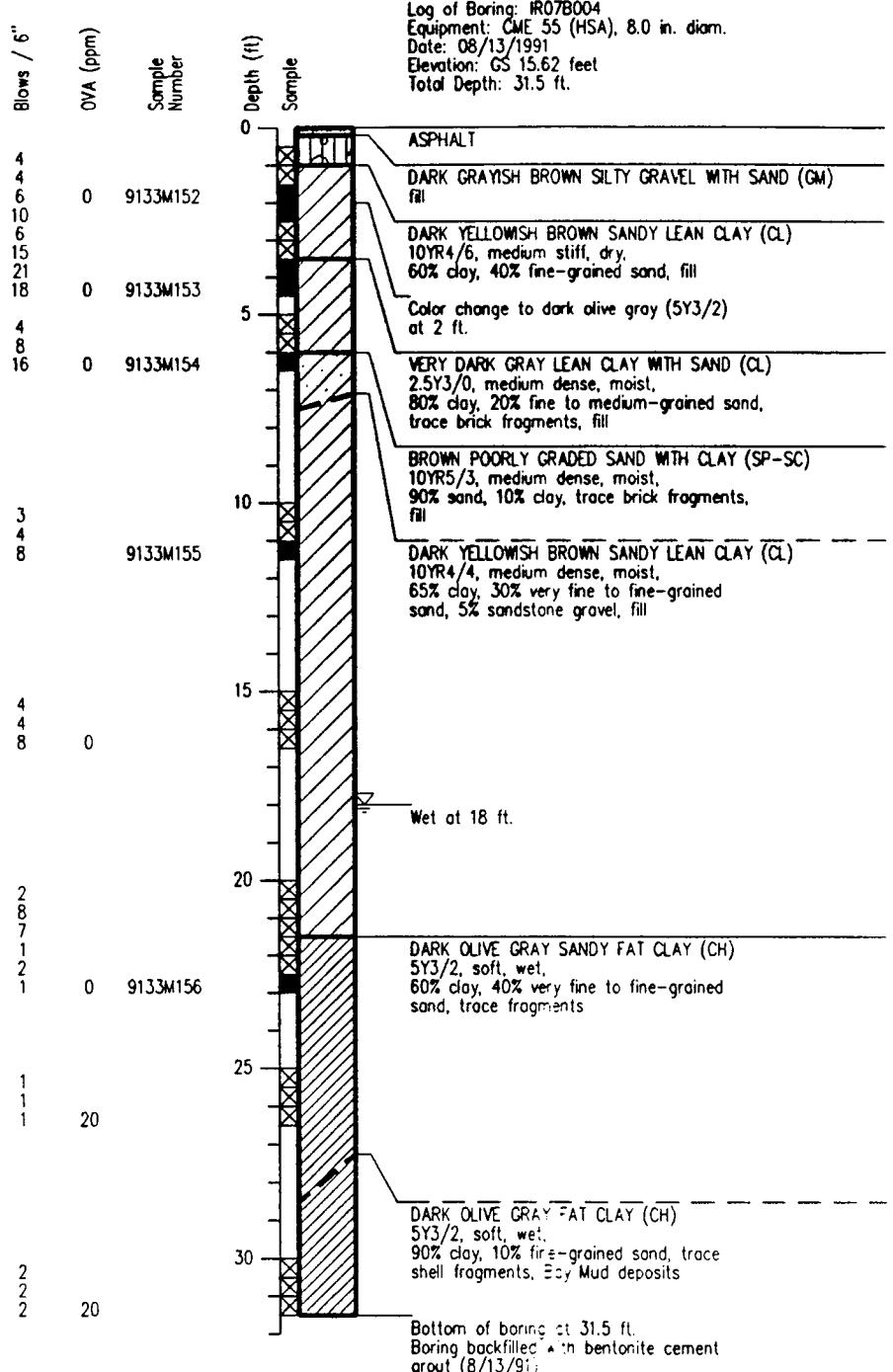
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B004
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
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PLATE

B5

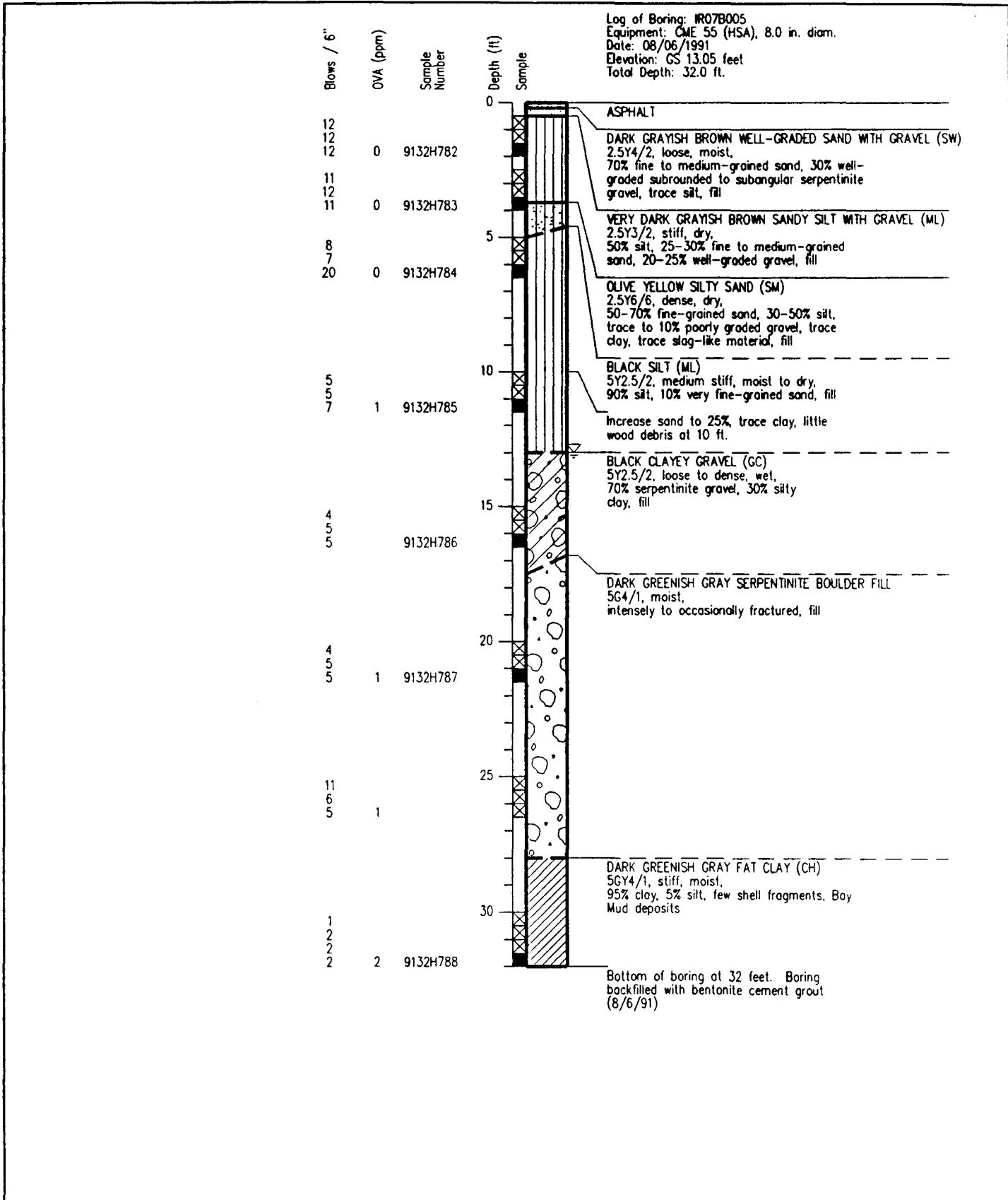
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JOB NUMBER
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Log of Boring: IR07B005
 Primary Phase Remedial Investigation
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PLATE
B6

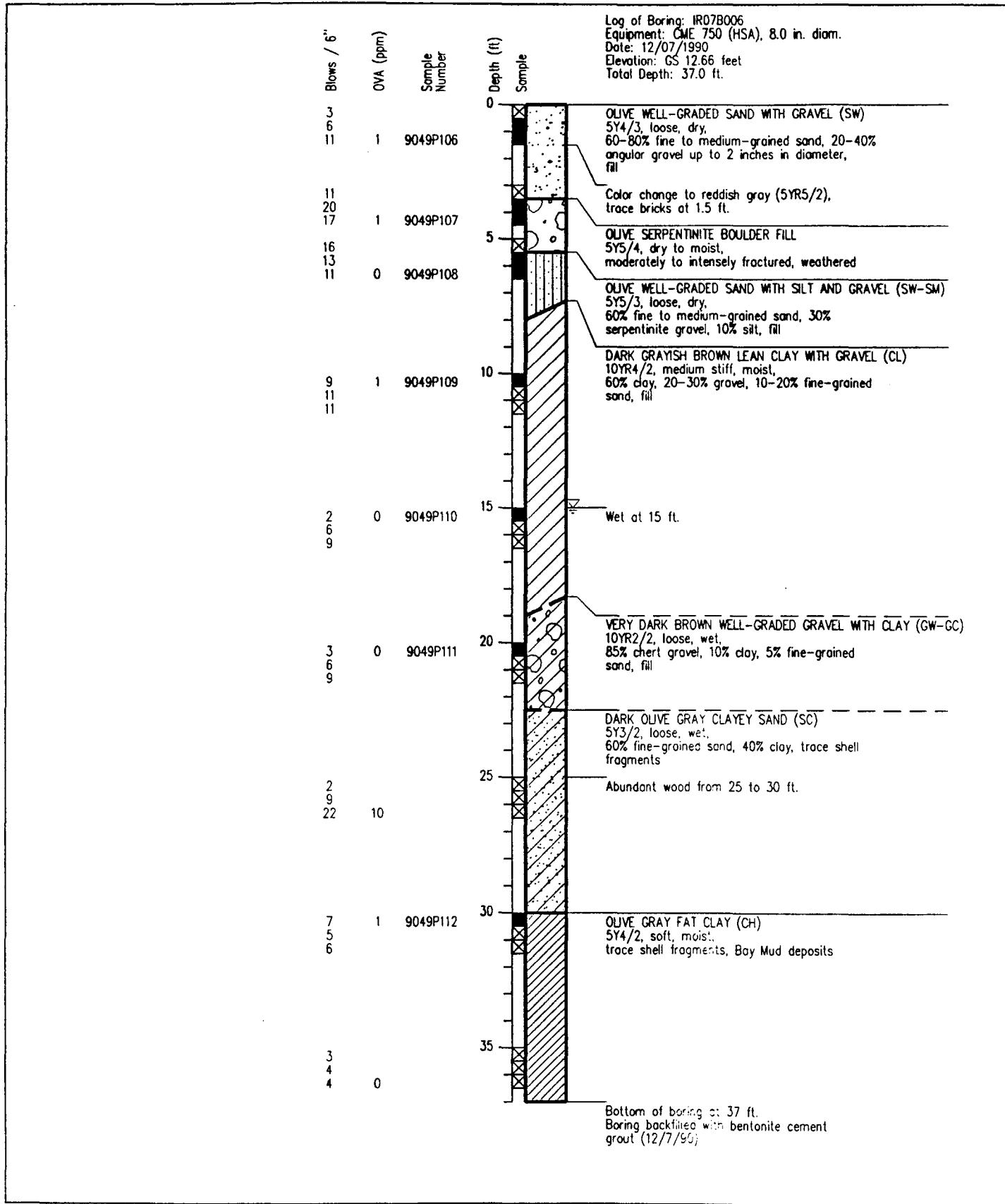
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JOB NUMBER
 18639,405.02

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Log of Boring: IR07B006
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
 San Francisco, California

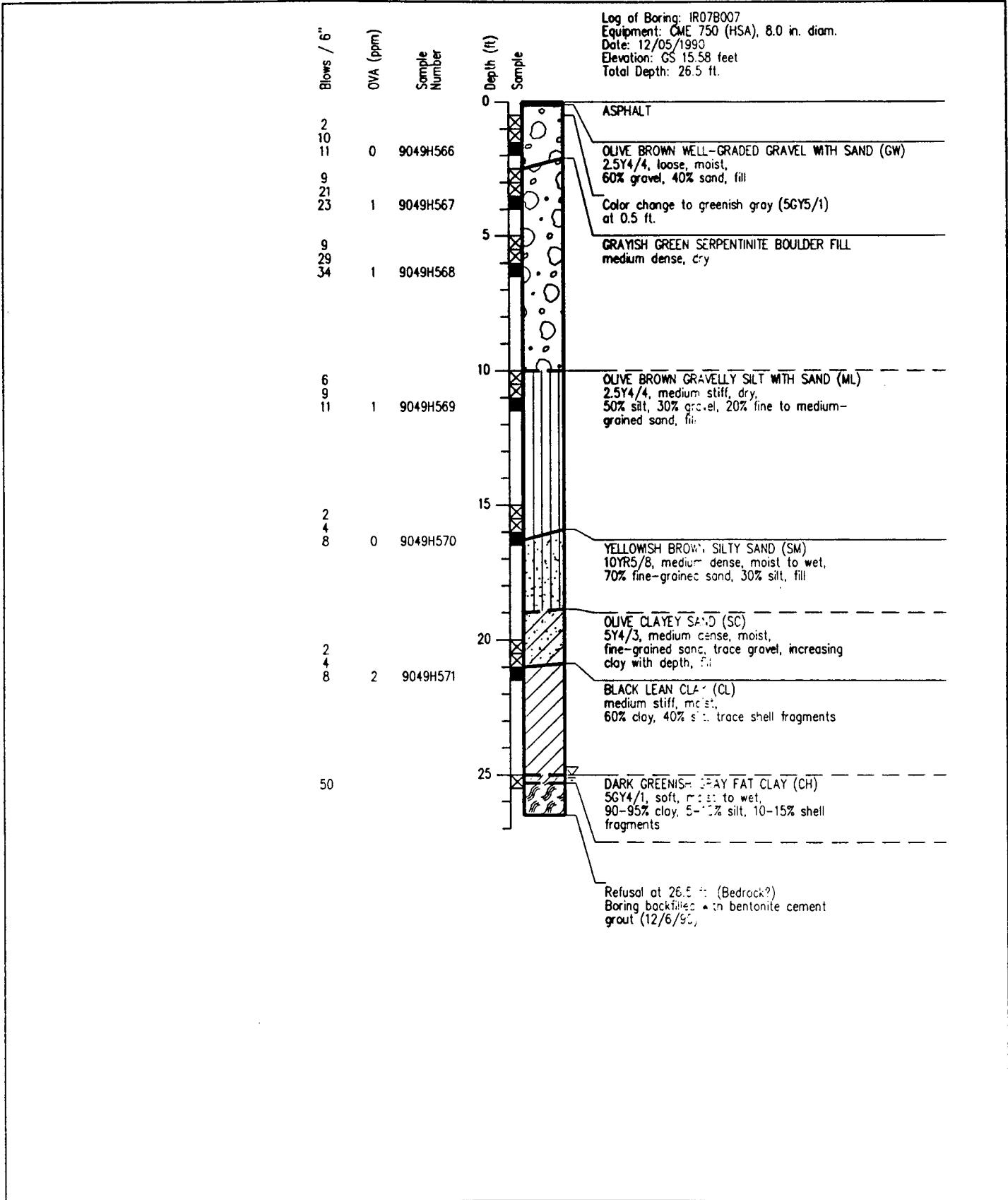
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Log of Boring: IR07B007
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PLATE

B8

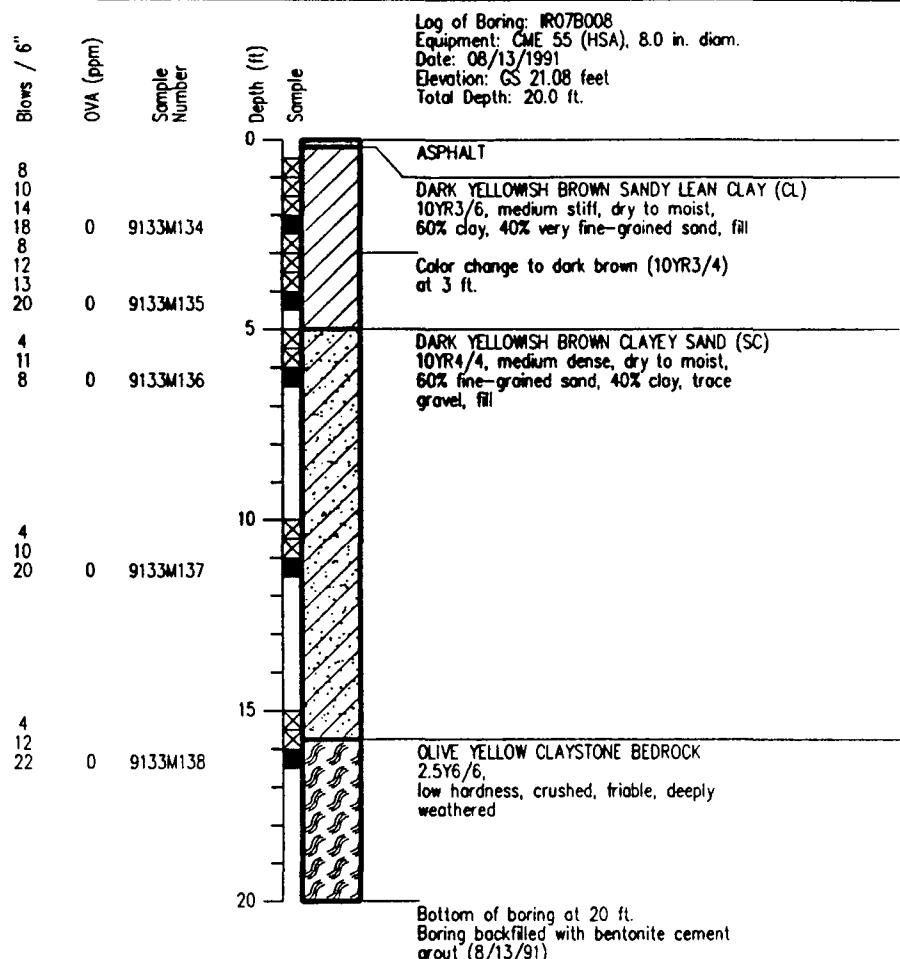
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18639,405.02

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Log of Boring: IR07B008
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PLATE

B9

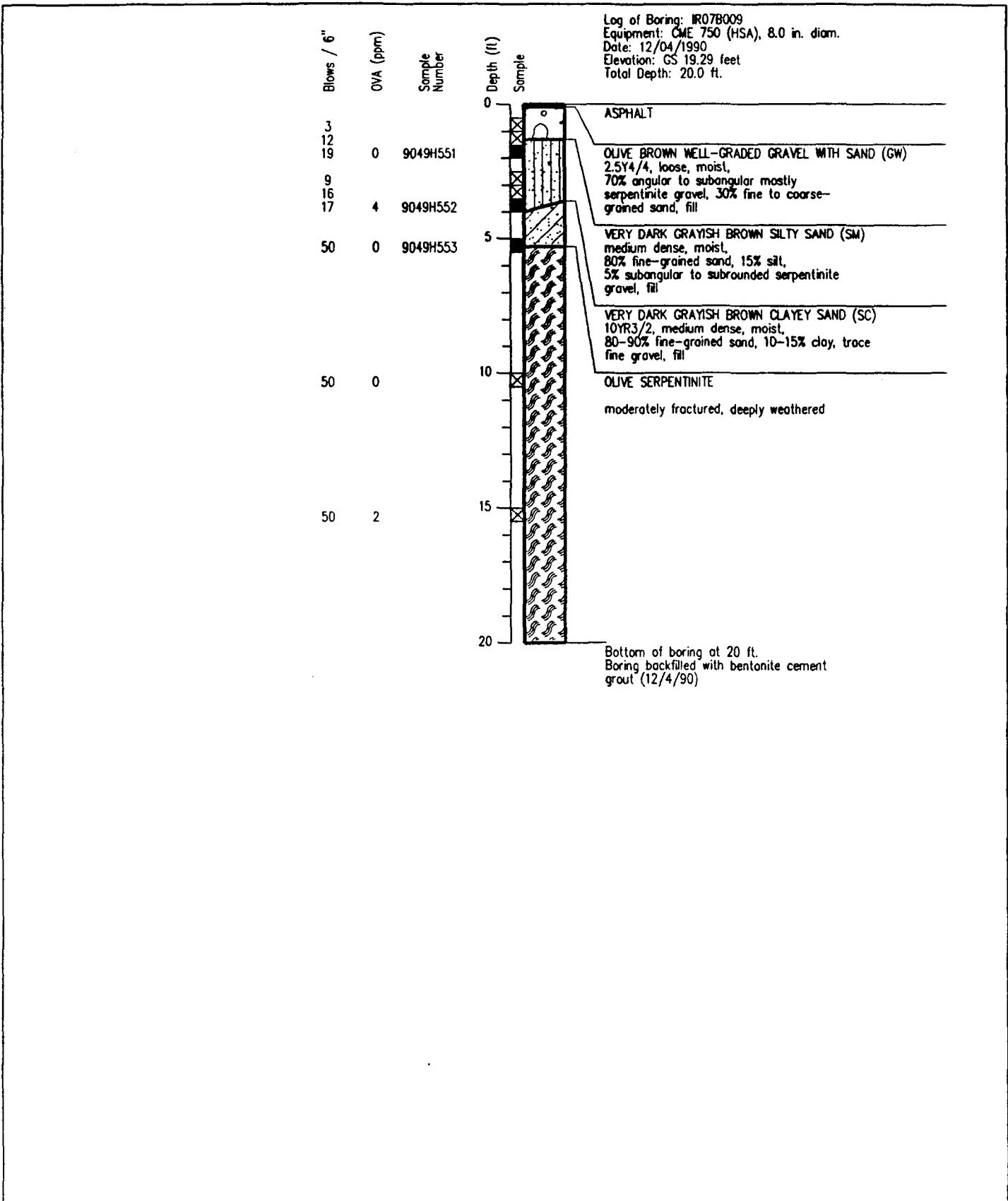
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Log of Boring: IR07B009
 Primary Phase Remedial Investigation
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PLATE

B10

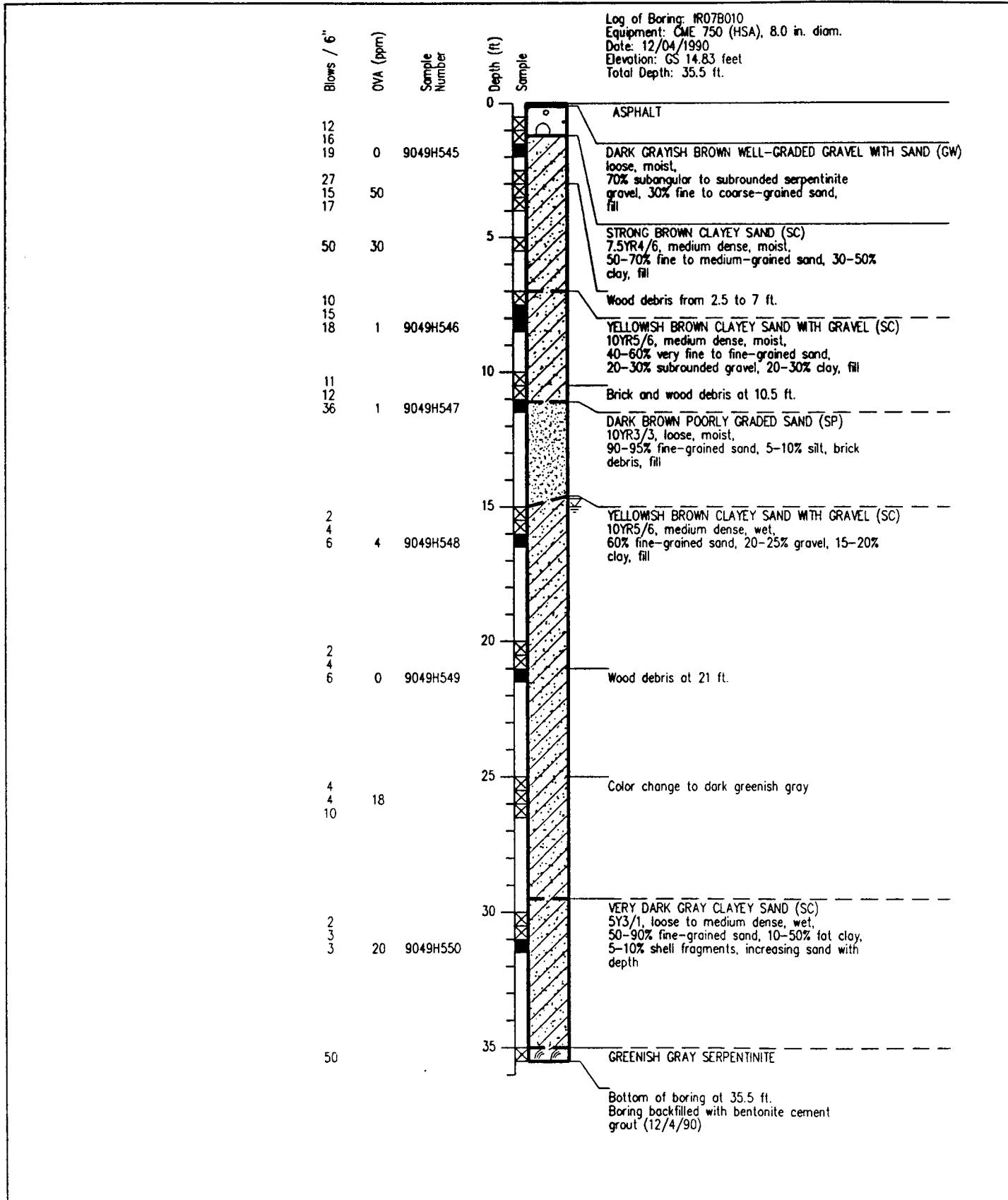
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JOB NUMBER
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Log of Boring: IR07B010
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PLATE

B11

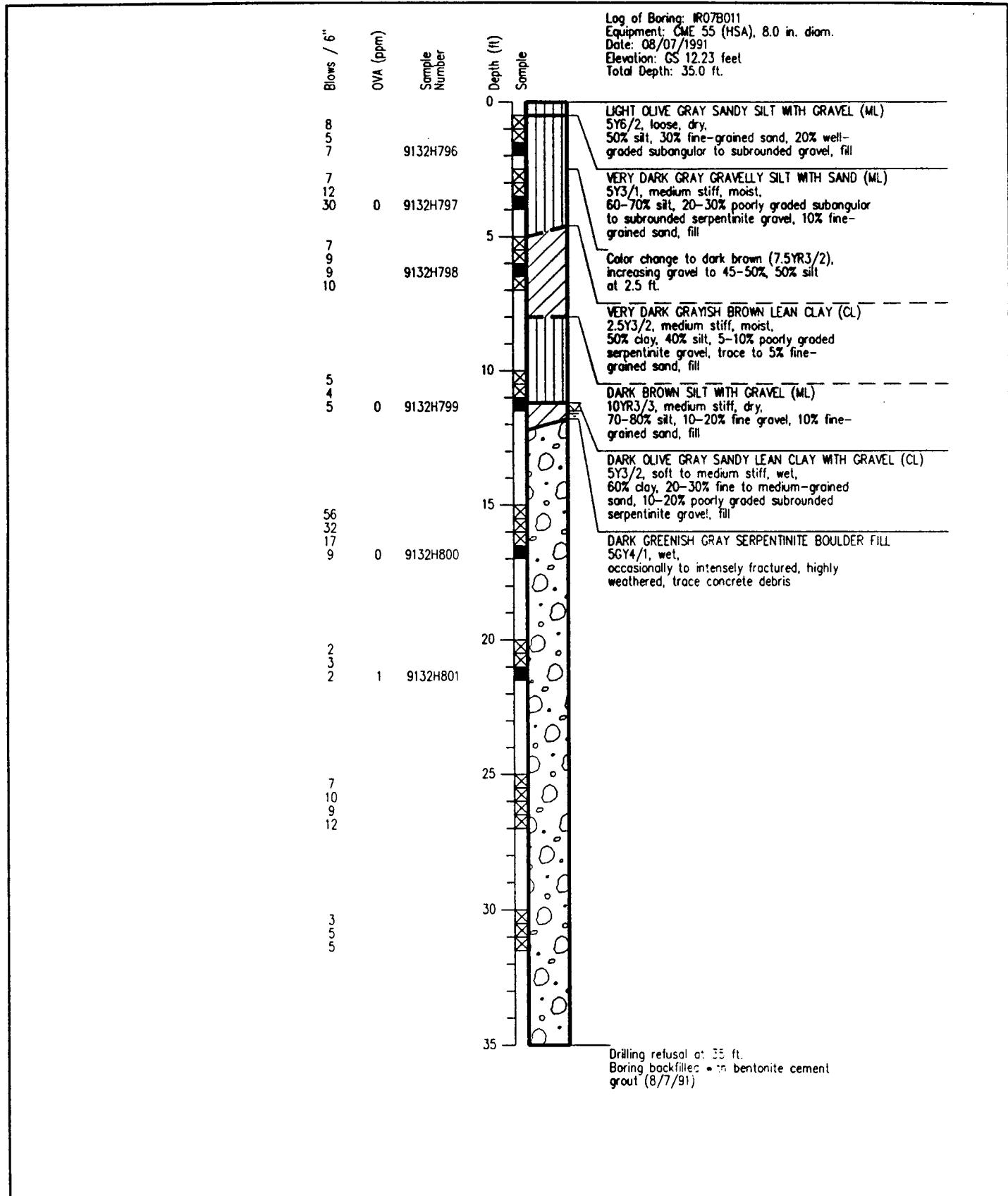
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Log of Boring: IR07B011
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PLATE

B12

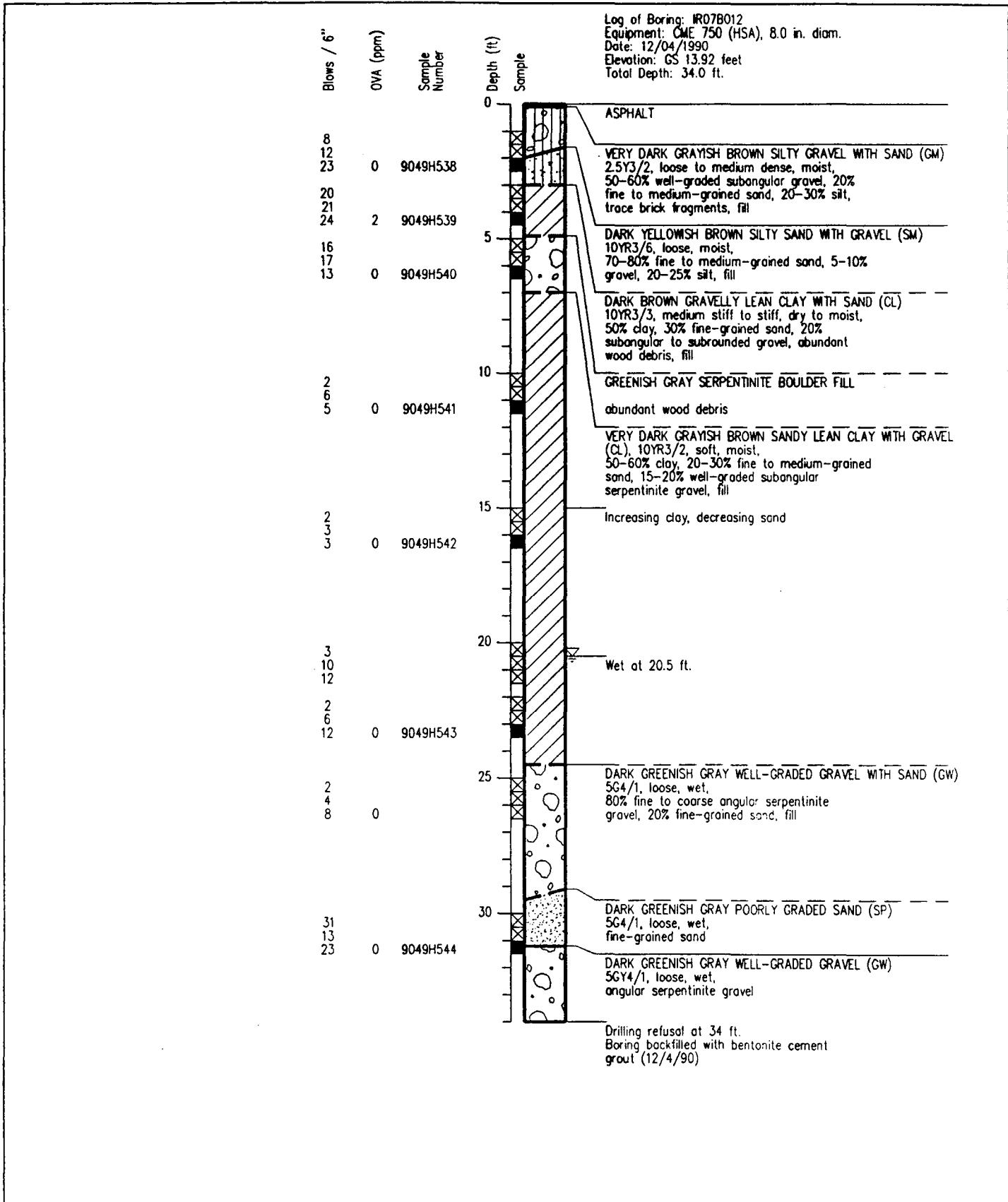
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B012
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PLATE

B13

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JOB NUMBER

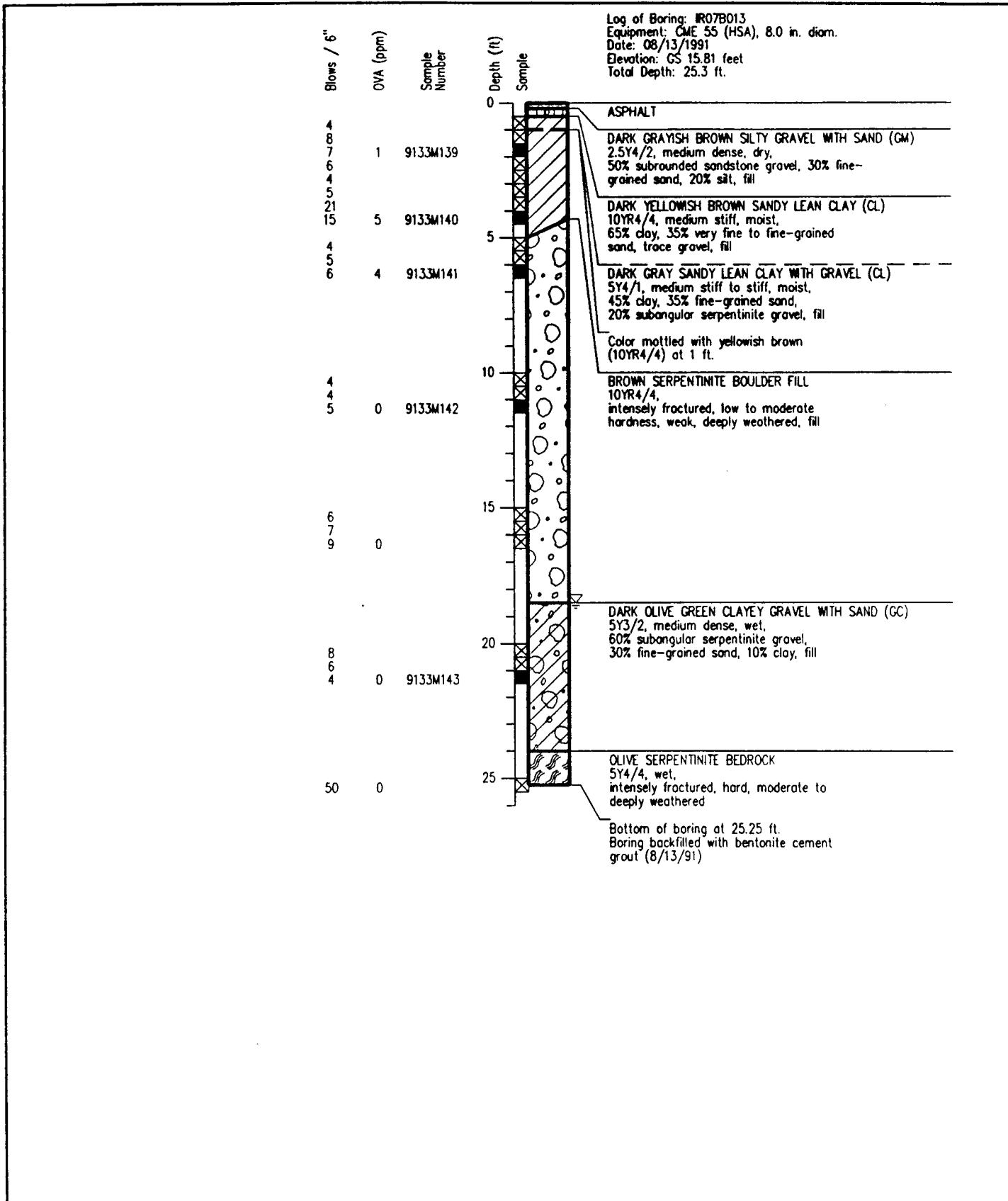
18639,405.02

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Log of Boring: IR07B013
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PLATE

B14

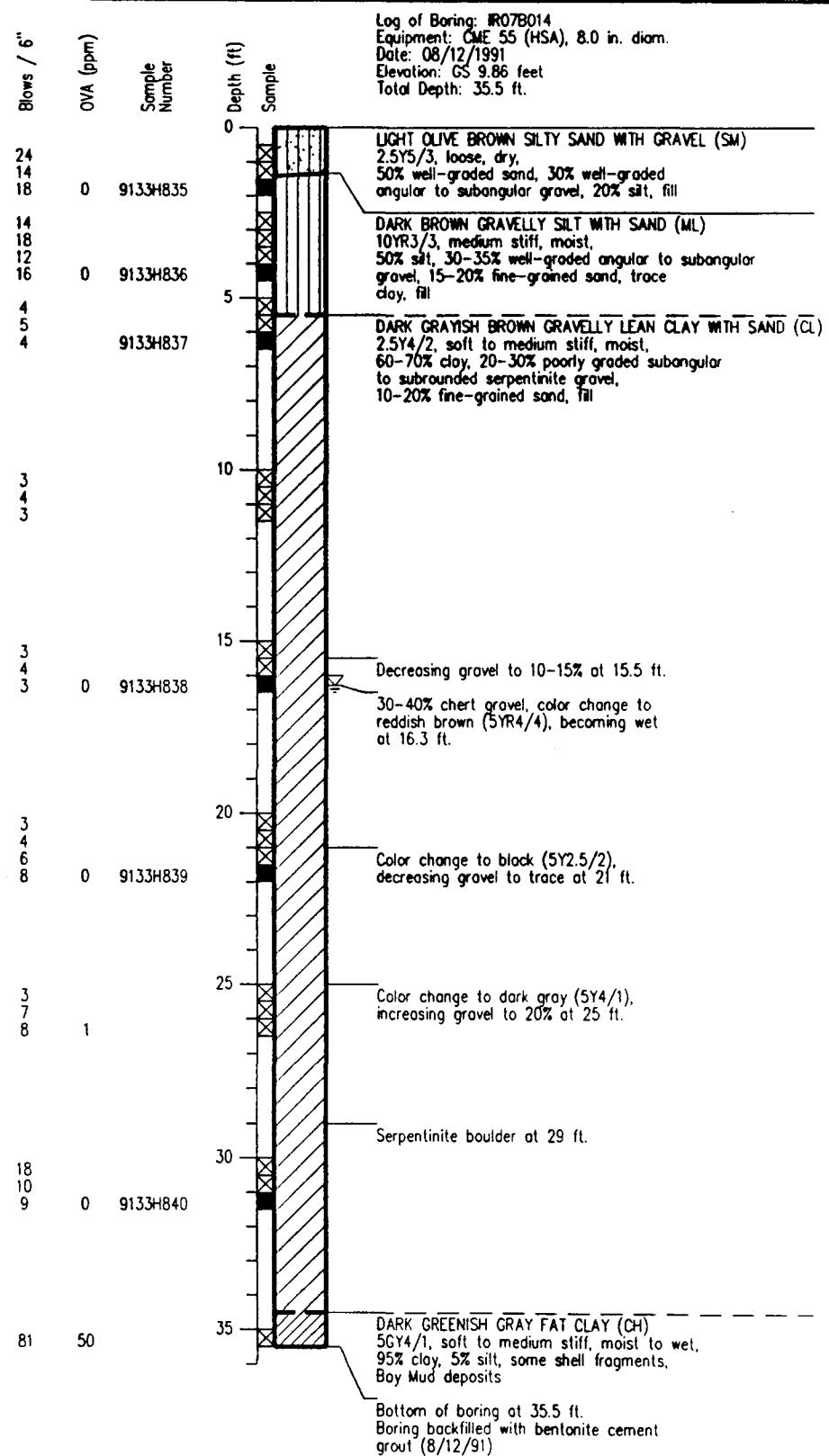
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B014
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PLATE

B15

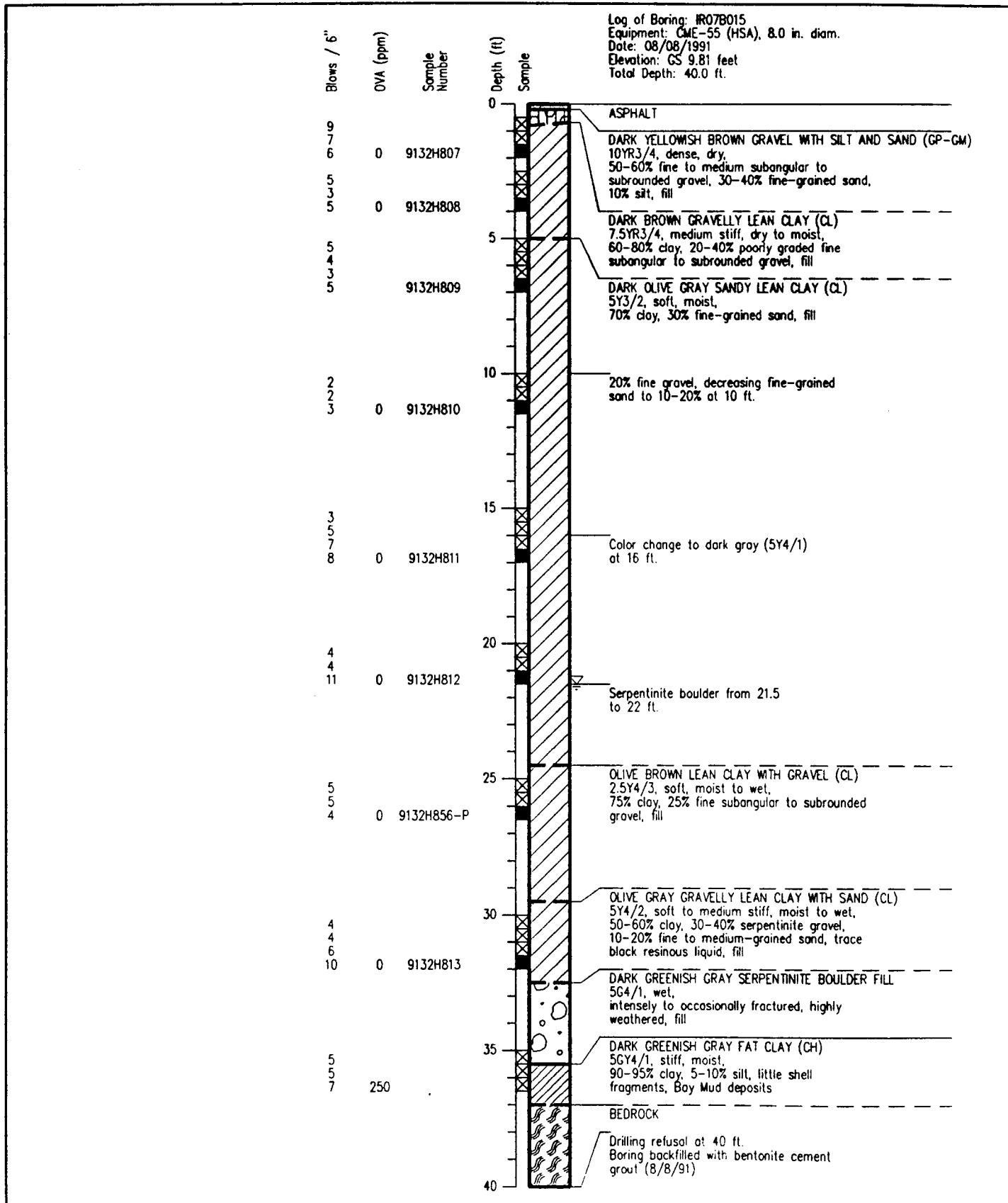
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JOB NUMBER
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Log of Boring: IR07B015
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PLATE

B16

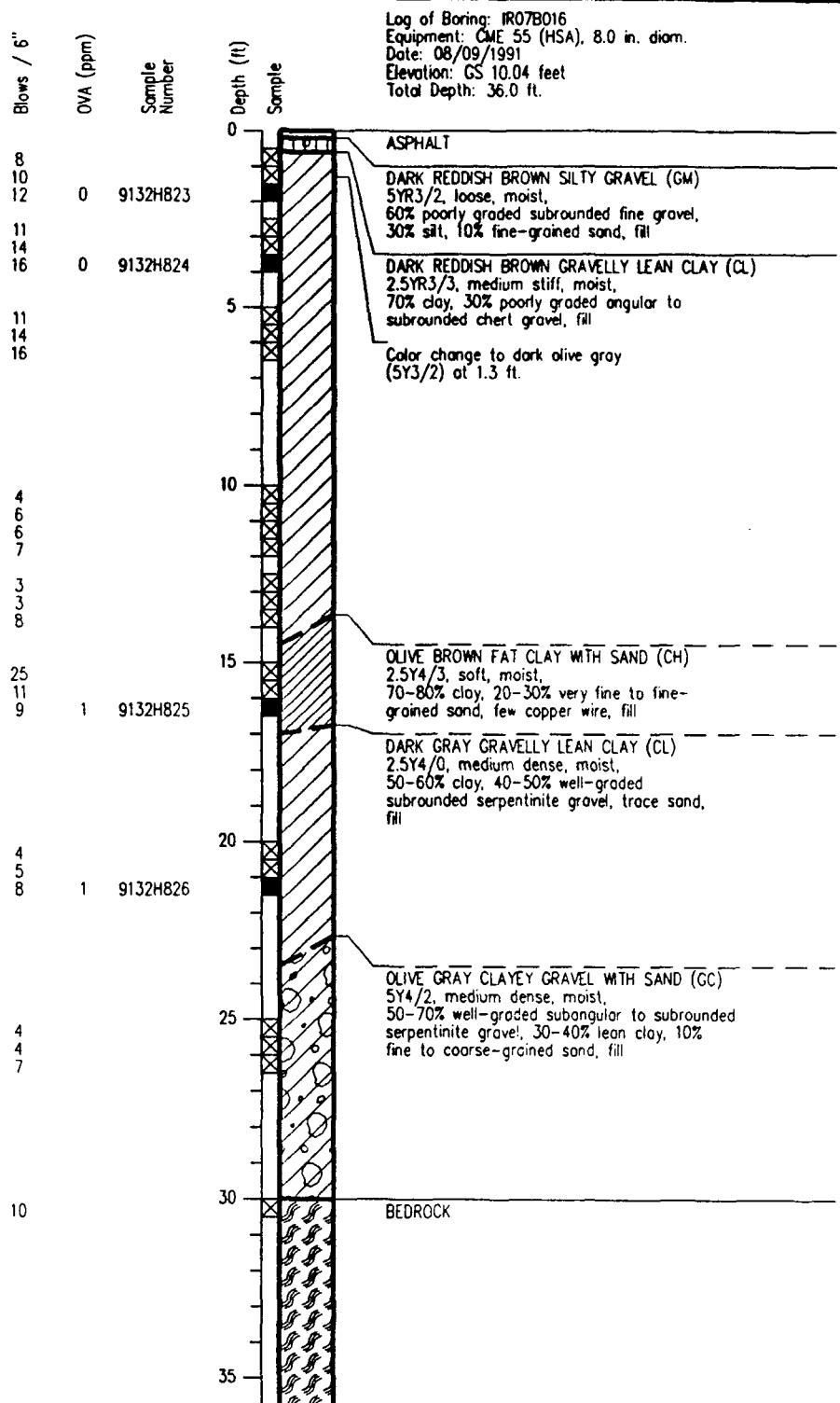
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8639,405.02

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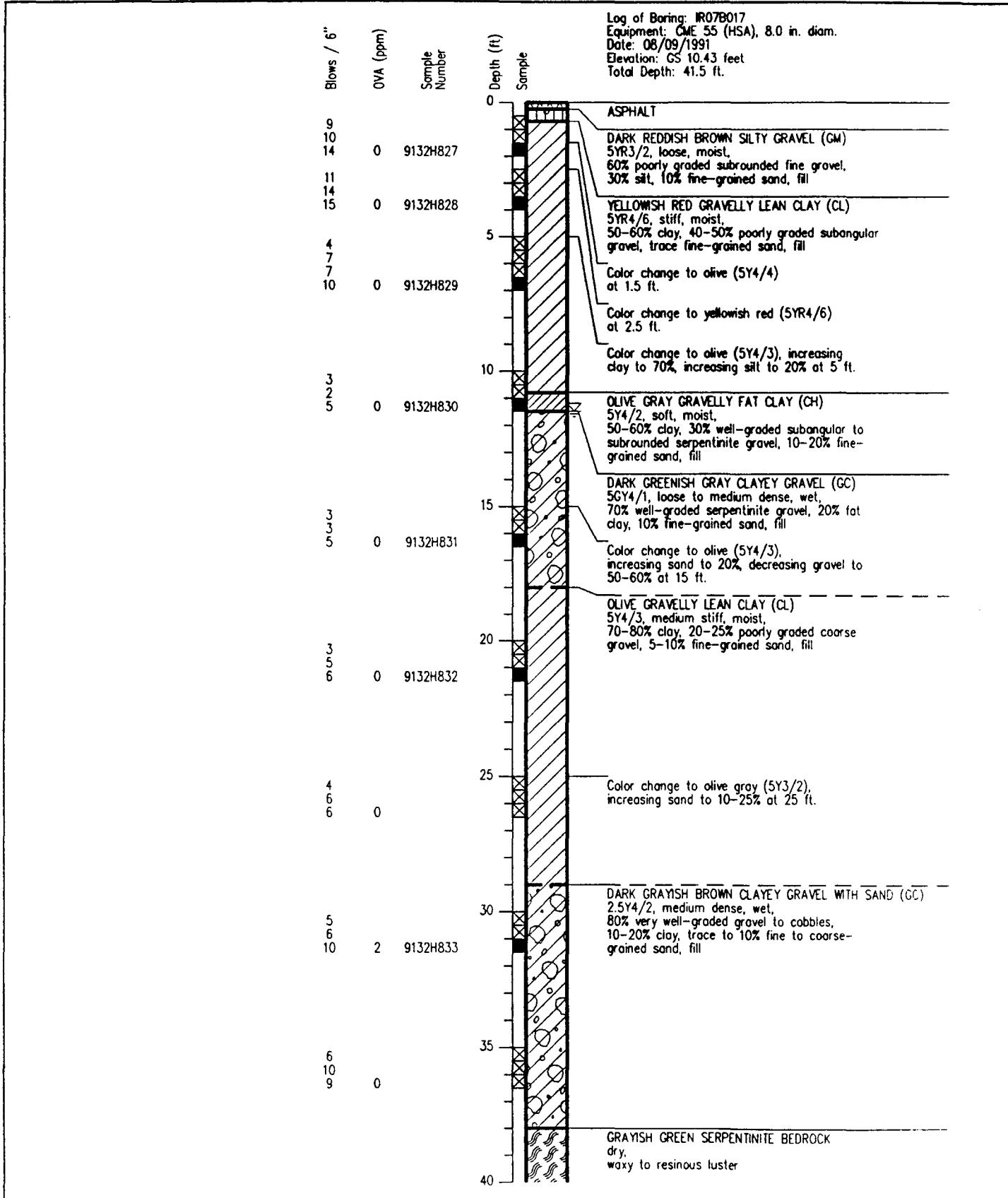
JOB NUMBER
18639,405.02

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DATE
12/91

REMOVED DATE

B17



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Log of Boring: IR07B017
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
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PLATE

B18a

DRAWN
GDT

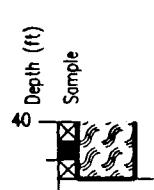
JOB NUMBER
18639,405.02

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DATE
12/91

REVISED DATE

Blows / 6"
14
30
50
OVA (ppm)
Sample Number
9132H834



Log of Boring: IR07B017 (p. 2)
Equipment: CME 55 (HSA), 8.0 in. diam.
Date: 08/09/1991
Elevation: GS 10.43 feet
Total Depth: 41.5 ft.

Bottom of boring at 41.5 ft.
Boring backfilled with bentonite cement
grout (8/9/91)



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Log of Boring: IR07B017
Primary Phase Remedial Investigation
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PLATE

B18b

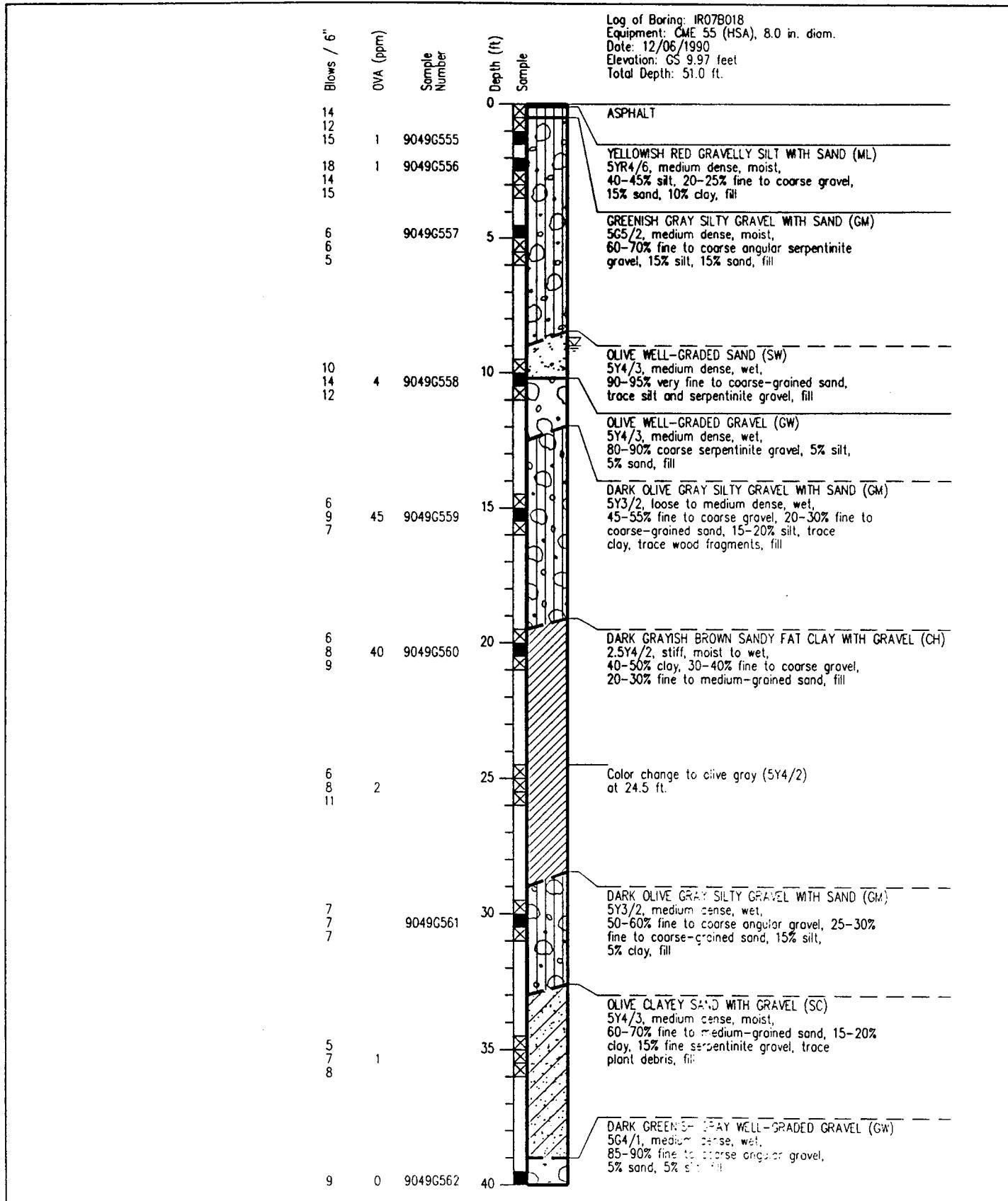
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B018
 Primary Phase Remedial Investigation
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PLATE

B19a

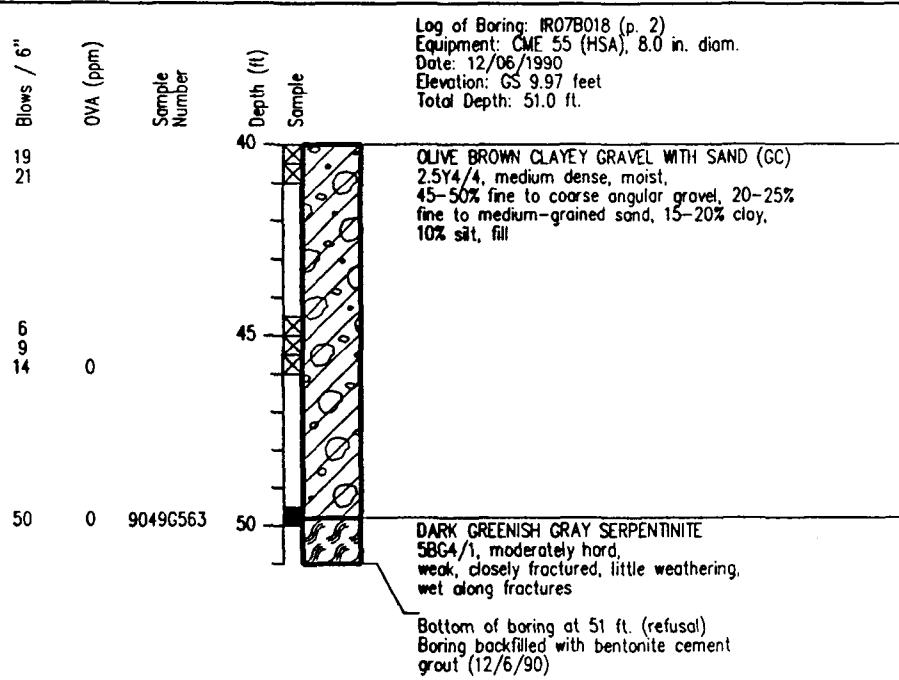
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JOB NUMBER
18639, 405.02

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Log of Boring: IR07B018
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
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PLATE

B19b

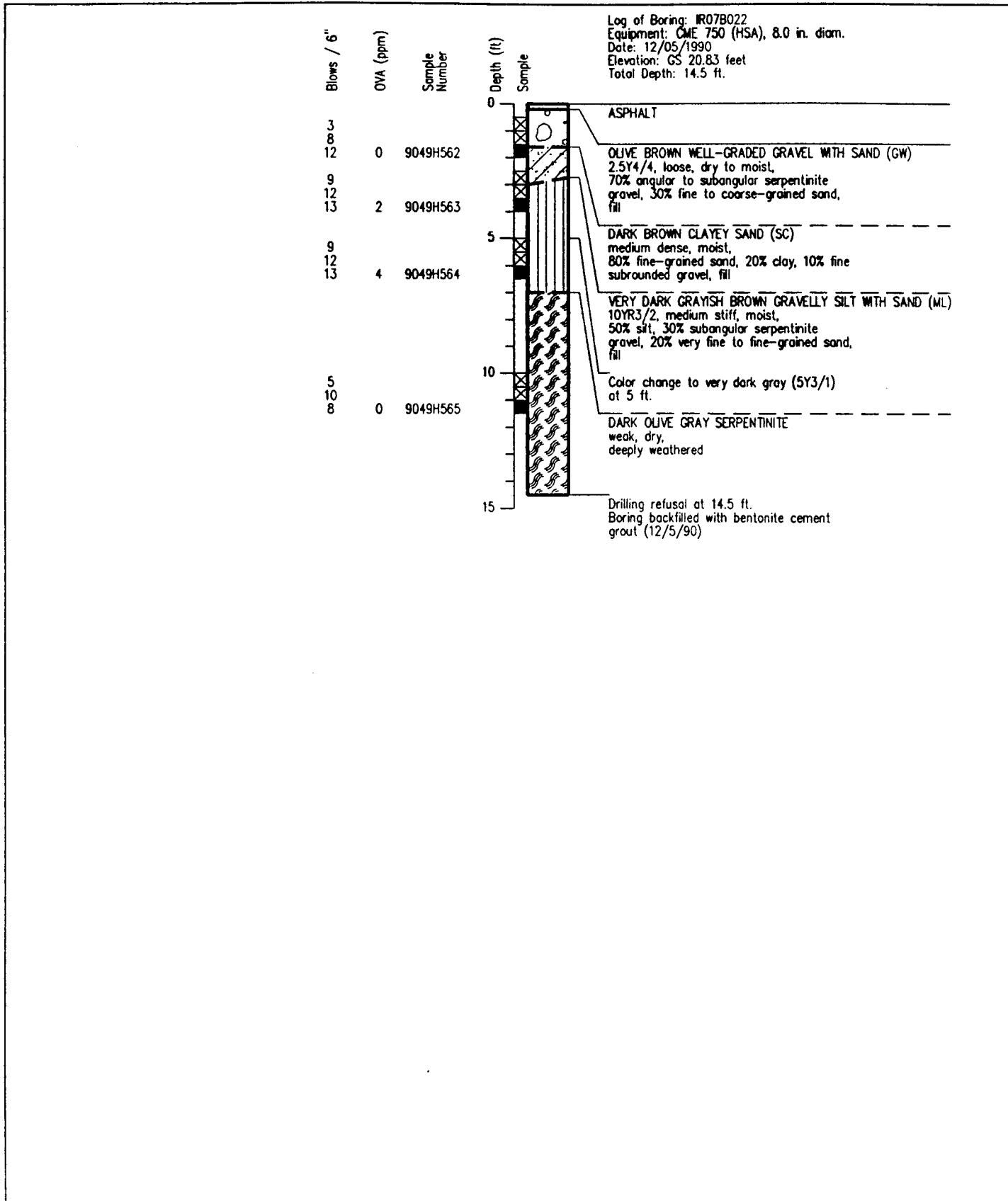
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JOB NUMBER
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Log of Boring: IR07B022
 Primary Phase Remedial Investigation
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PLATE
B20

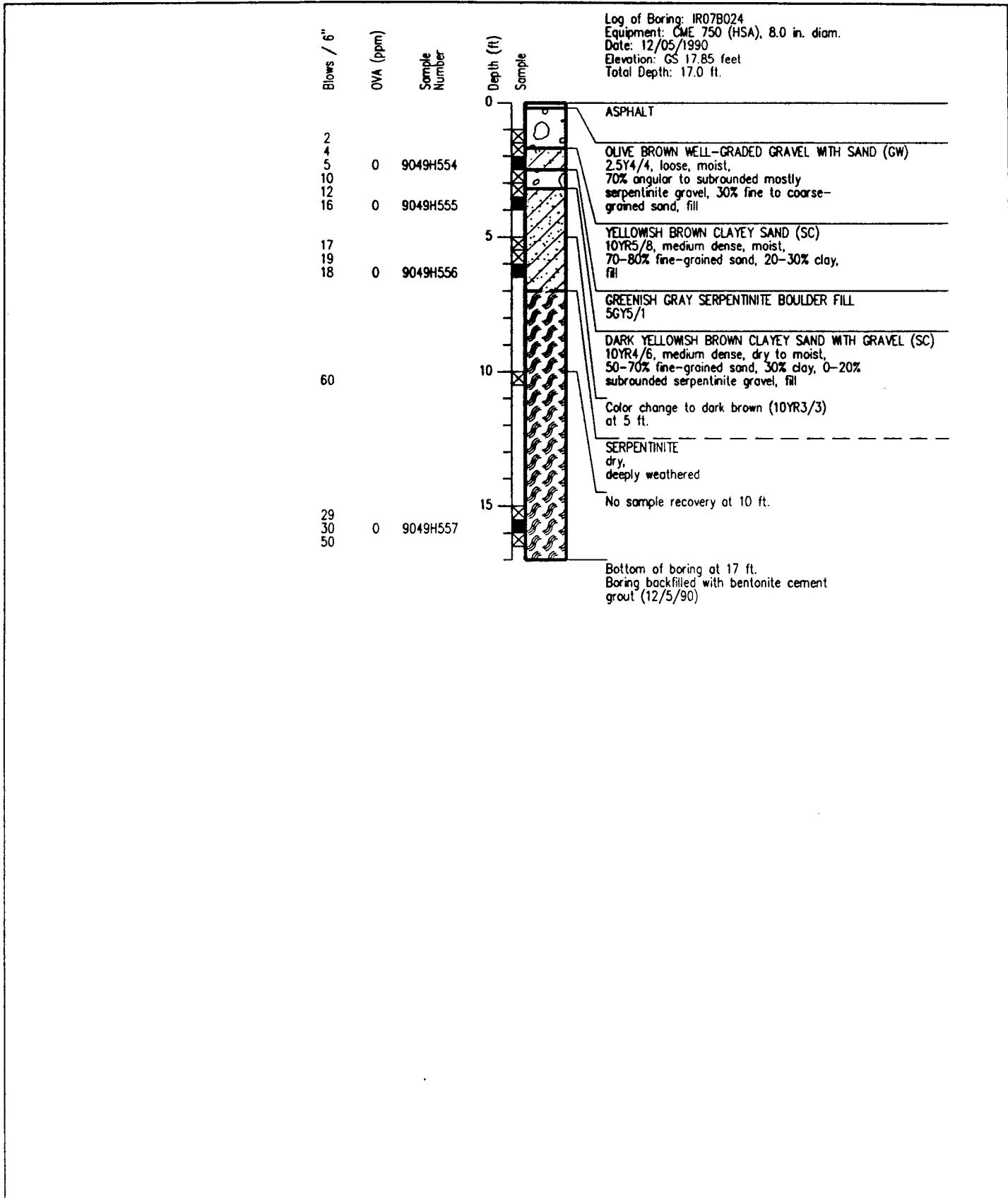
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B024
 Primary Phase Remedial Investigation
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PLATE

B21

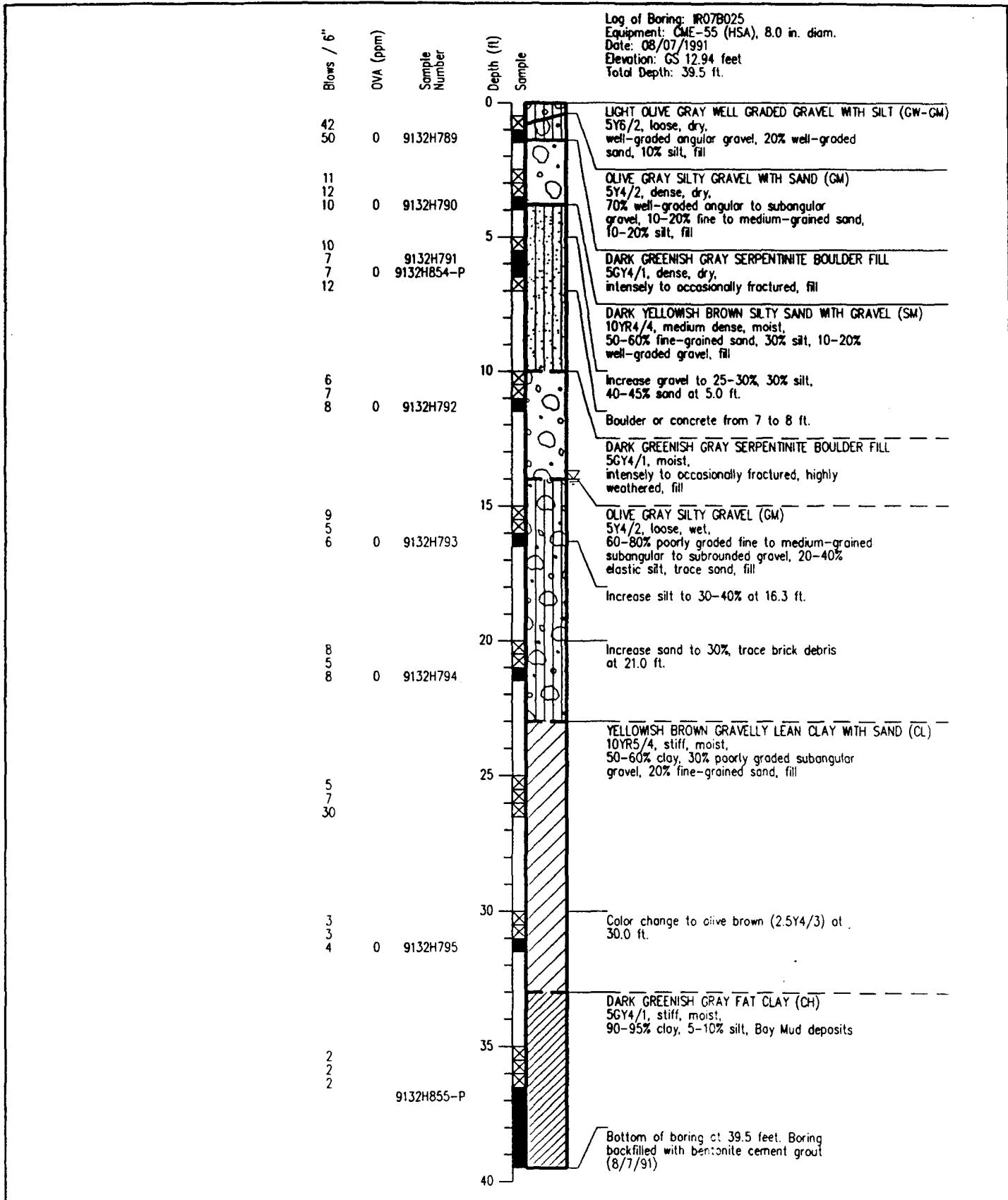
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B025
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PLATE

B22

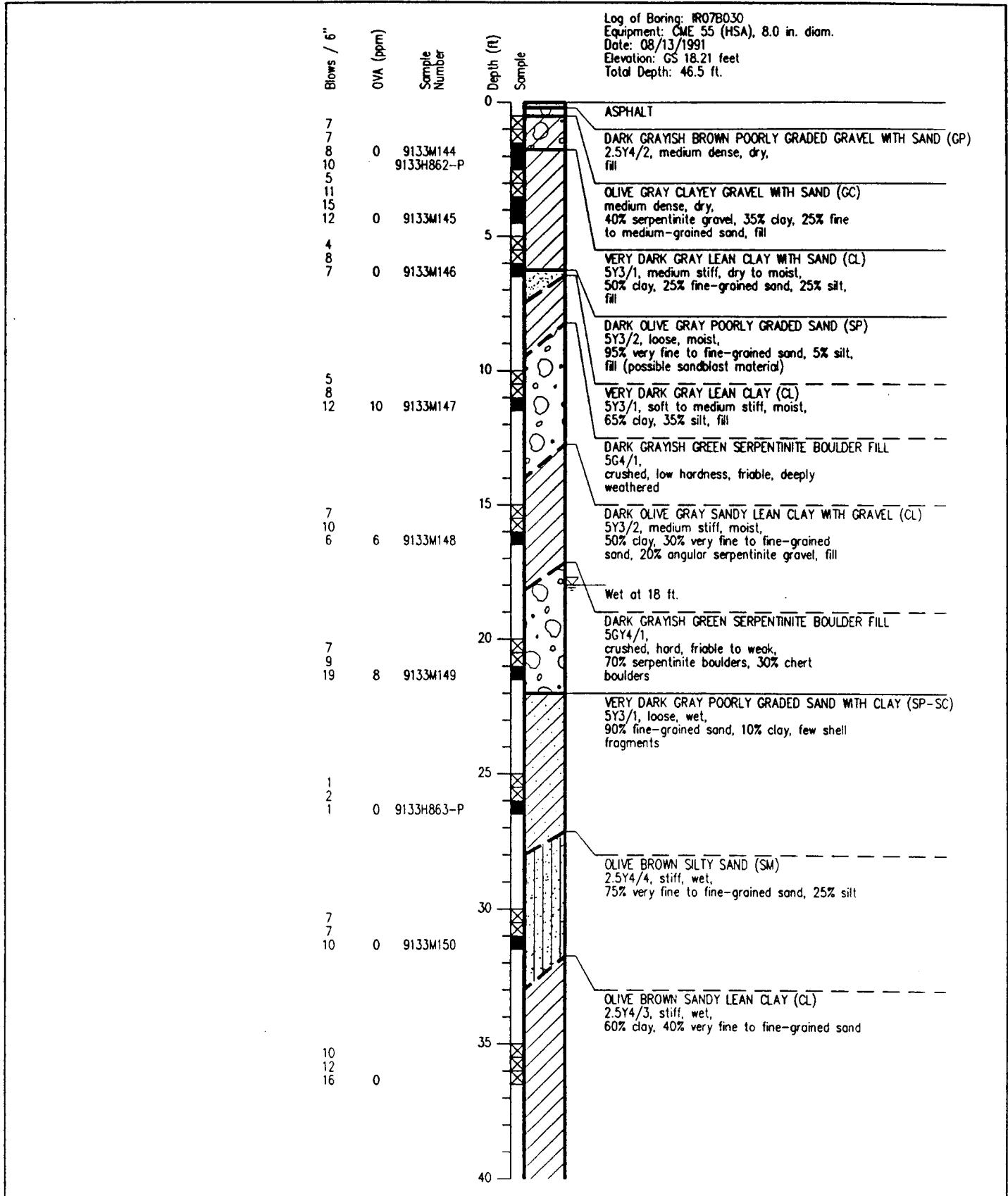
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JOB NUMBER
18639,405.02

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Log of Boring: IR07B030
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
 San Francisco, California

PLATE

B23a

DRAWN
GDT

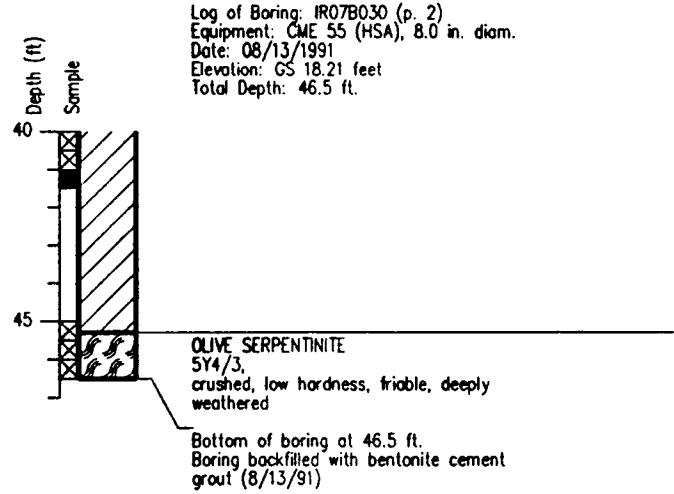
JOB NUMBER
18639,405.02

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Blows / 6"	OVA (ppm)	Sample Number
5	0	9133M151
7		
10	0	
10		
48		
50	0	



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PLATE

B23b

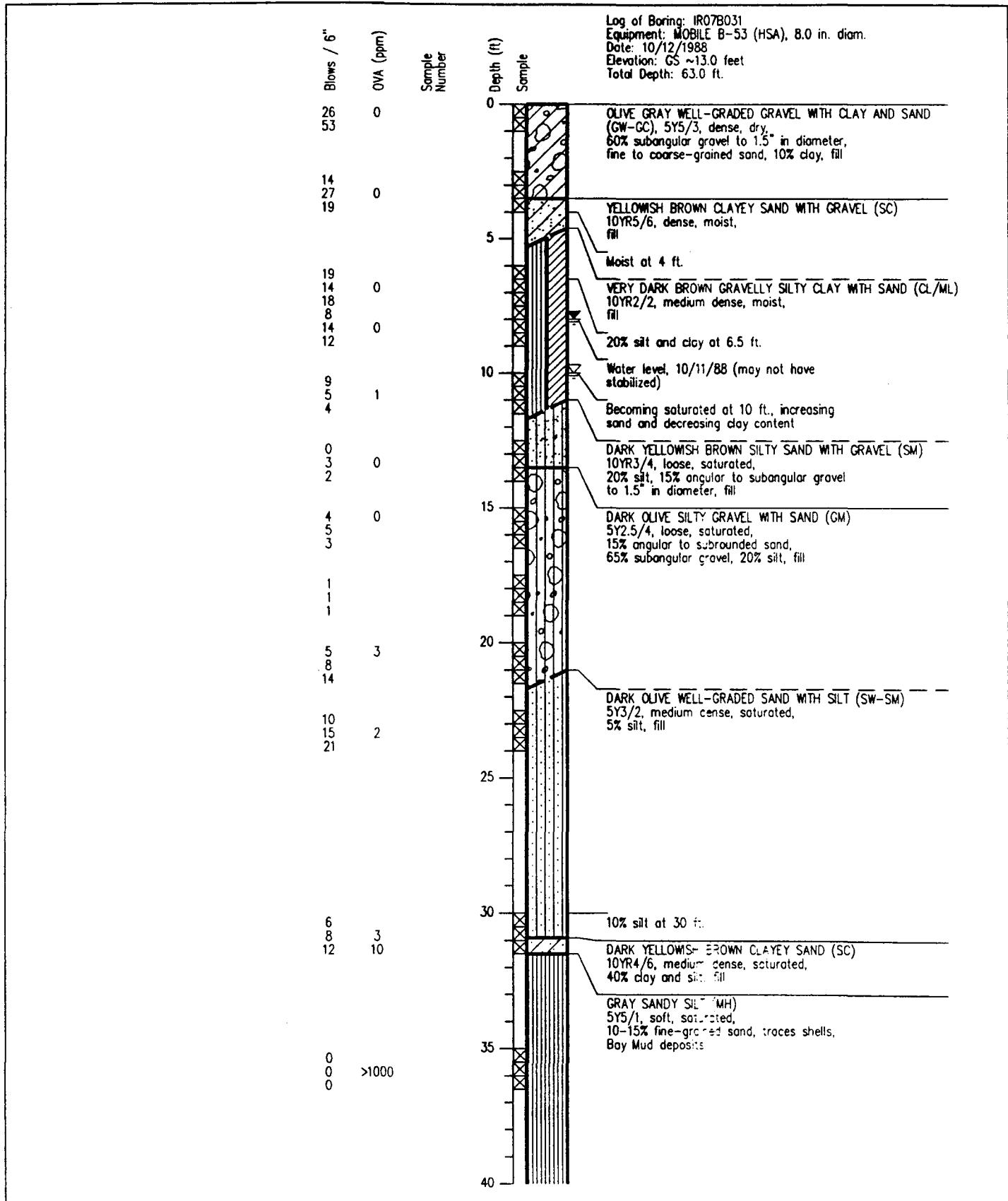
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JOB NUMBER
18639,405.02

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DATE
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Log of Boring: IR07B031
 Primary Phase Remedial Investigation
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 San Francisco, California

PLATE

B24a

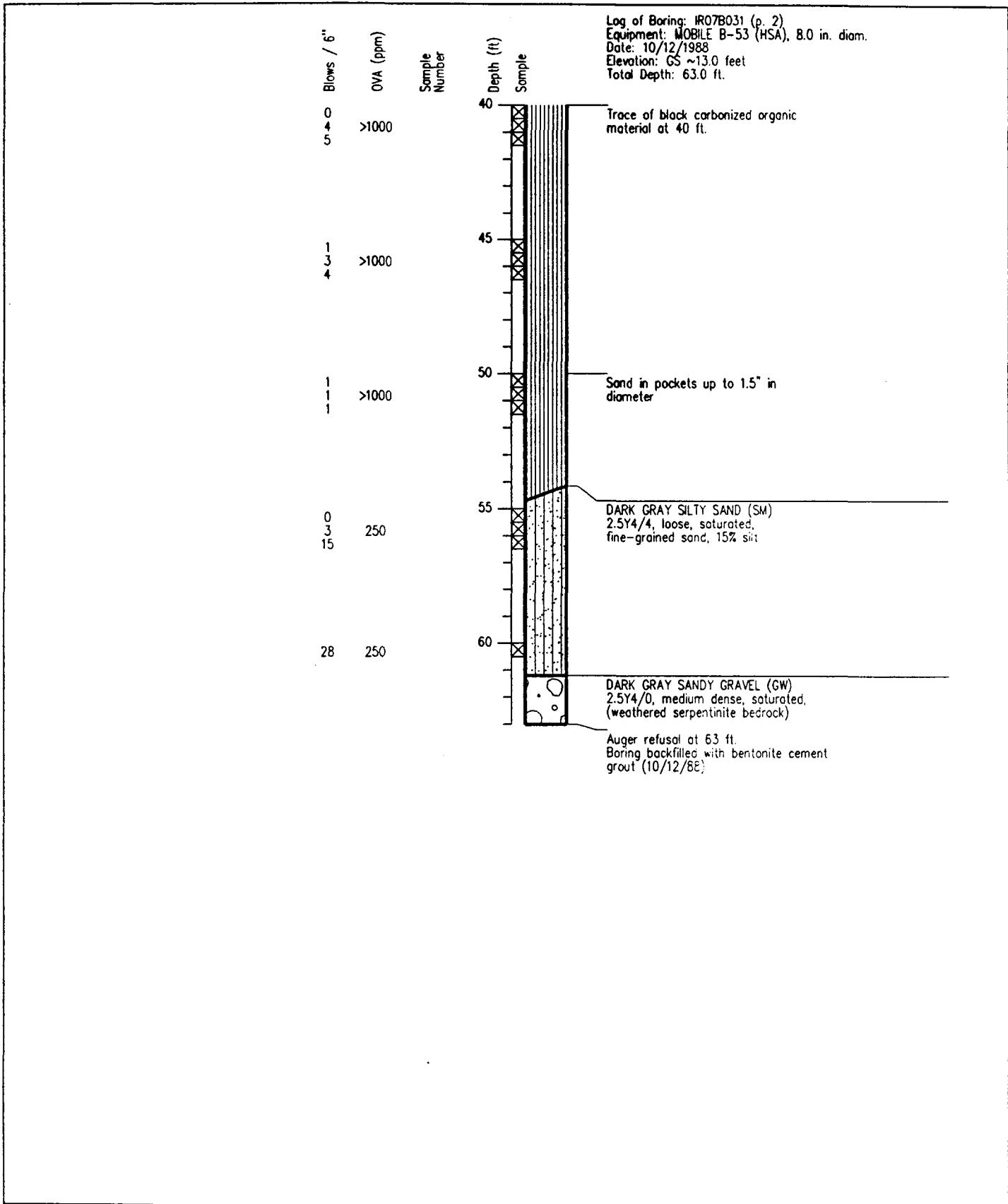
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GDT

JOB NUMBER
18639,405.02

APPROVED

DATE
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REVISED DATE



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Log of Boring: IR07B031
 Primary Phase Remedial Investigation
 Naval Station, Treasure Island, Hunters Point Annex
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PLATE

B24b

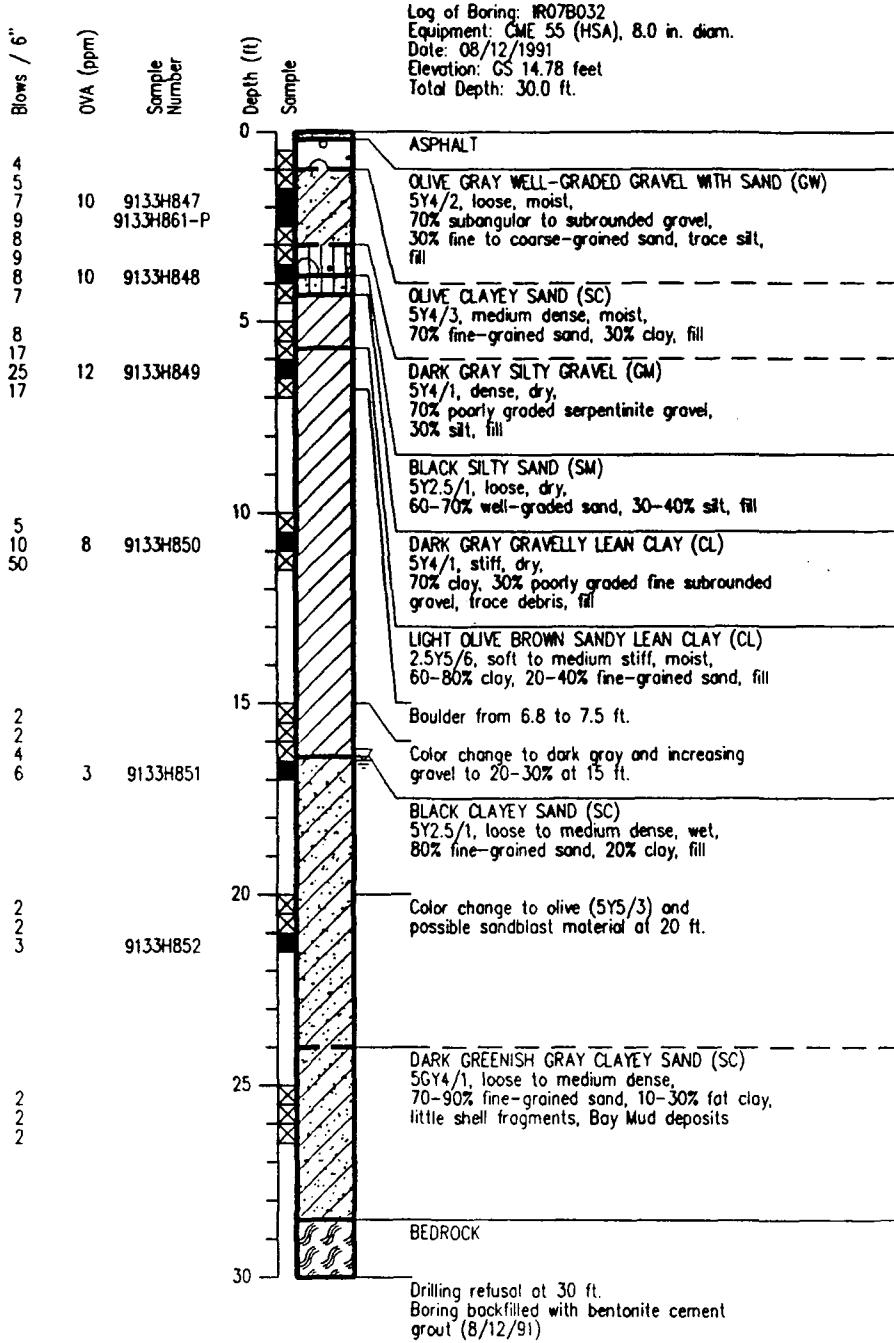
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18639,405.02

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PLATE

B25

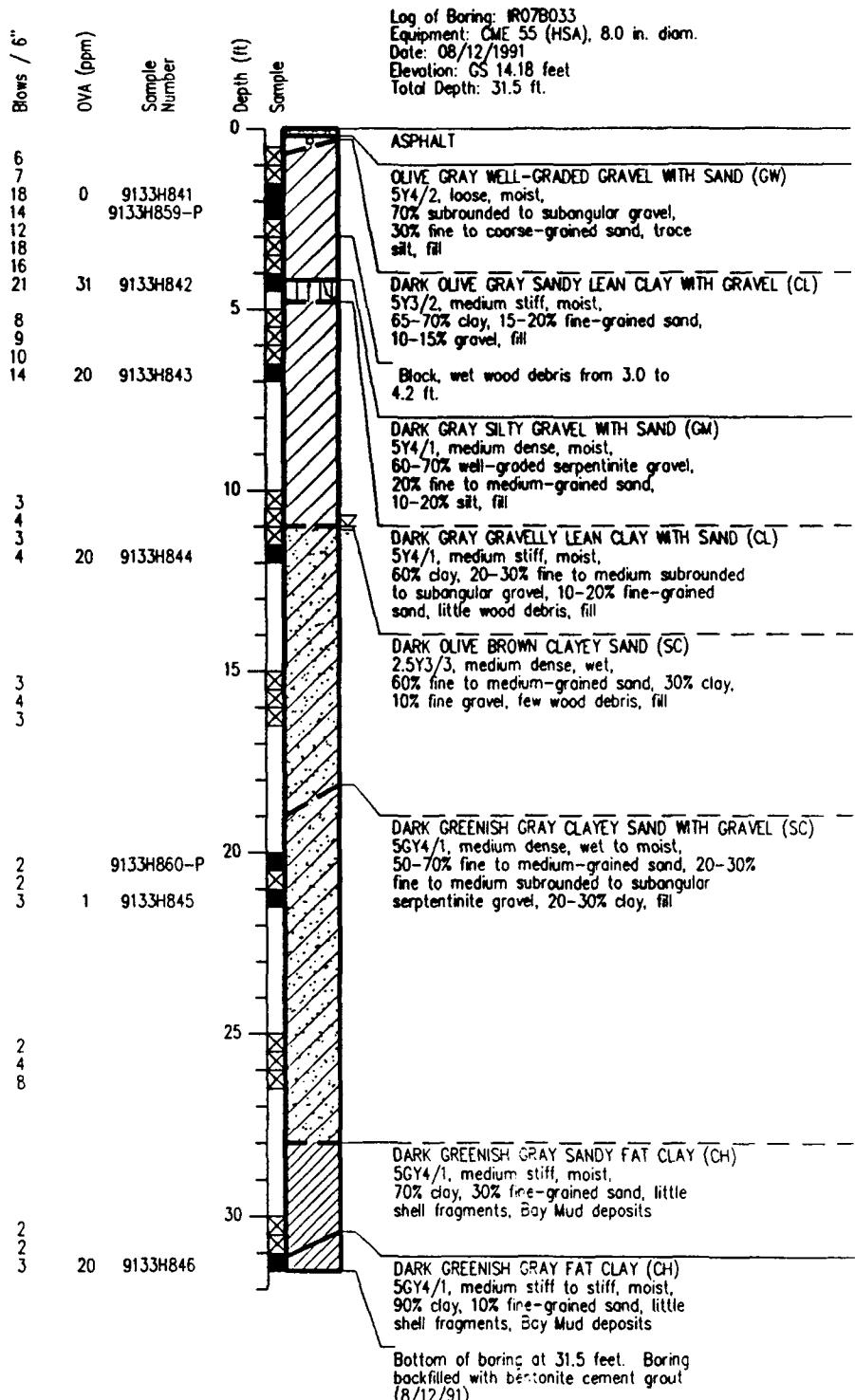
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JOB NUMBER
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Primary Phase Remedial Investigation
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PLATE

B26

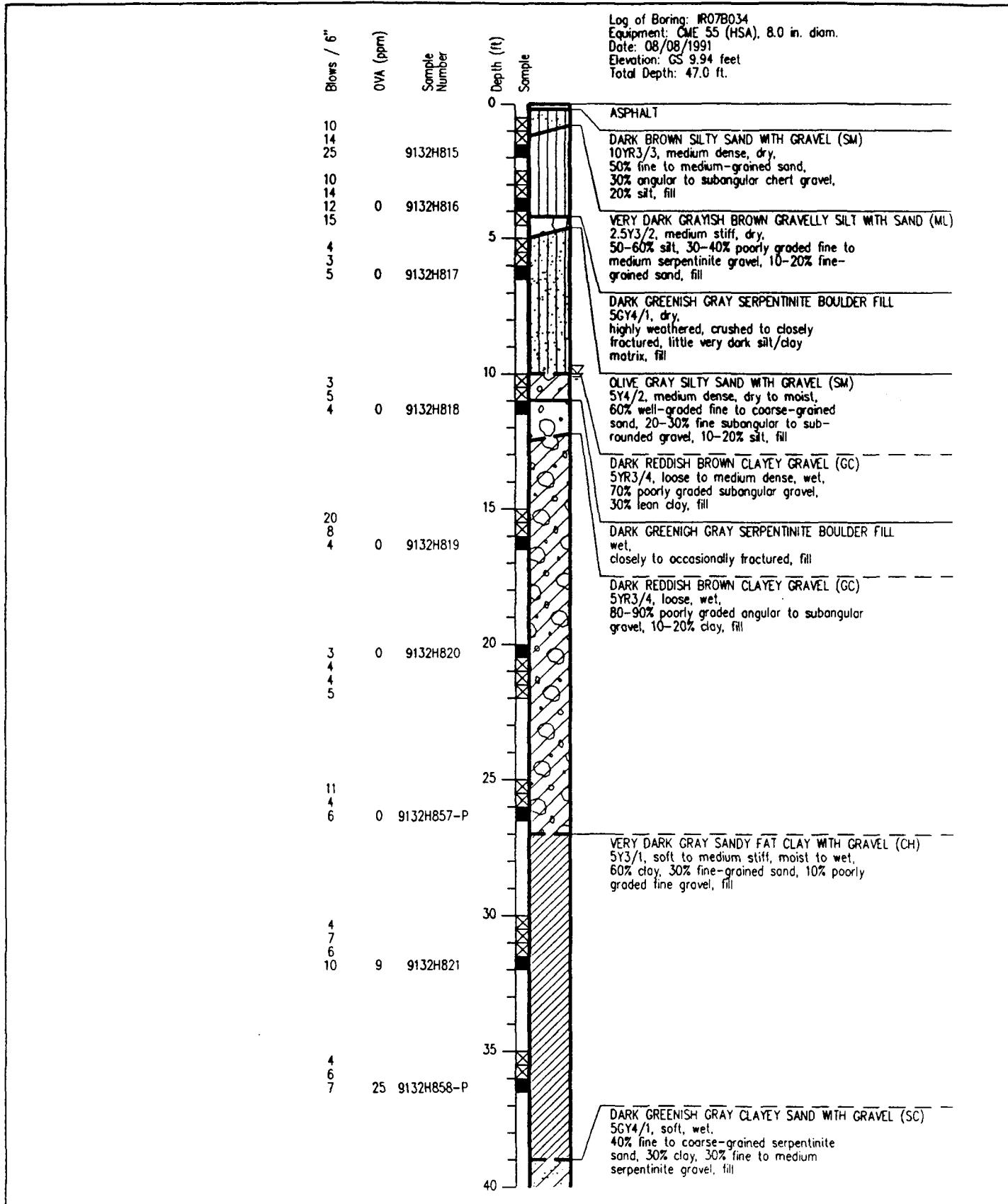
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JOB NUMBER
18639,405.02

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PLATE

B27a

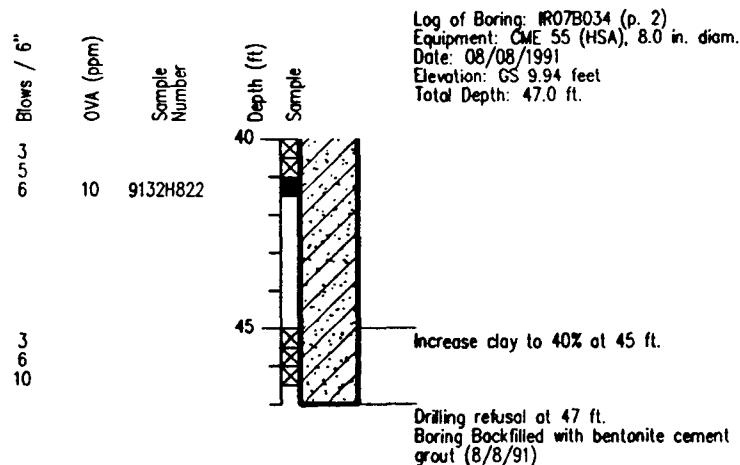
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JOB NUMBER
18639,405.02

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DATE
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GDT

JOB NUMBER
18639,405.02

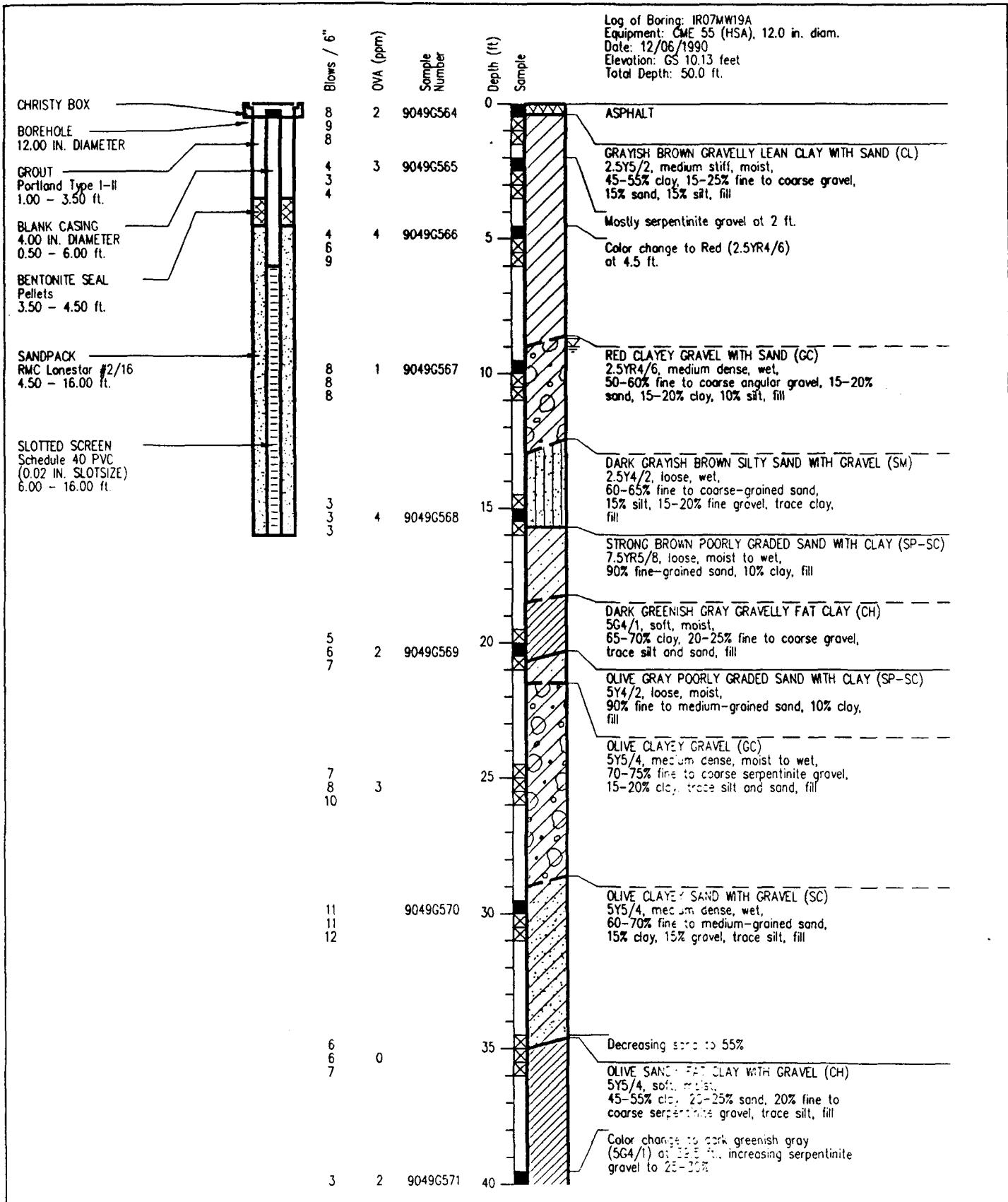
Log of Boring: IR07B034
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B27b



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PLATE

B28a

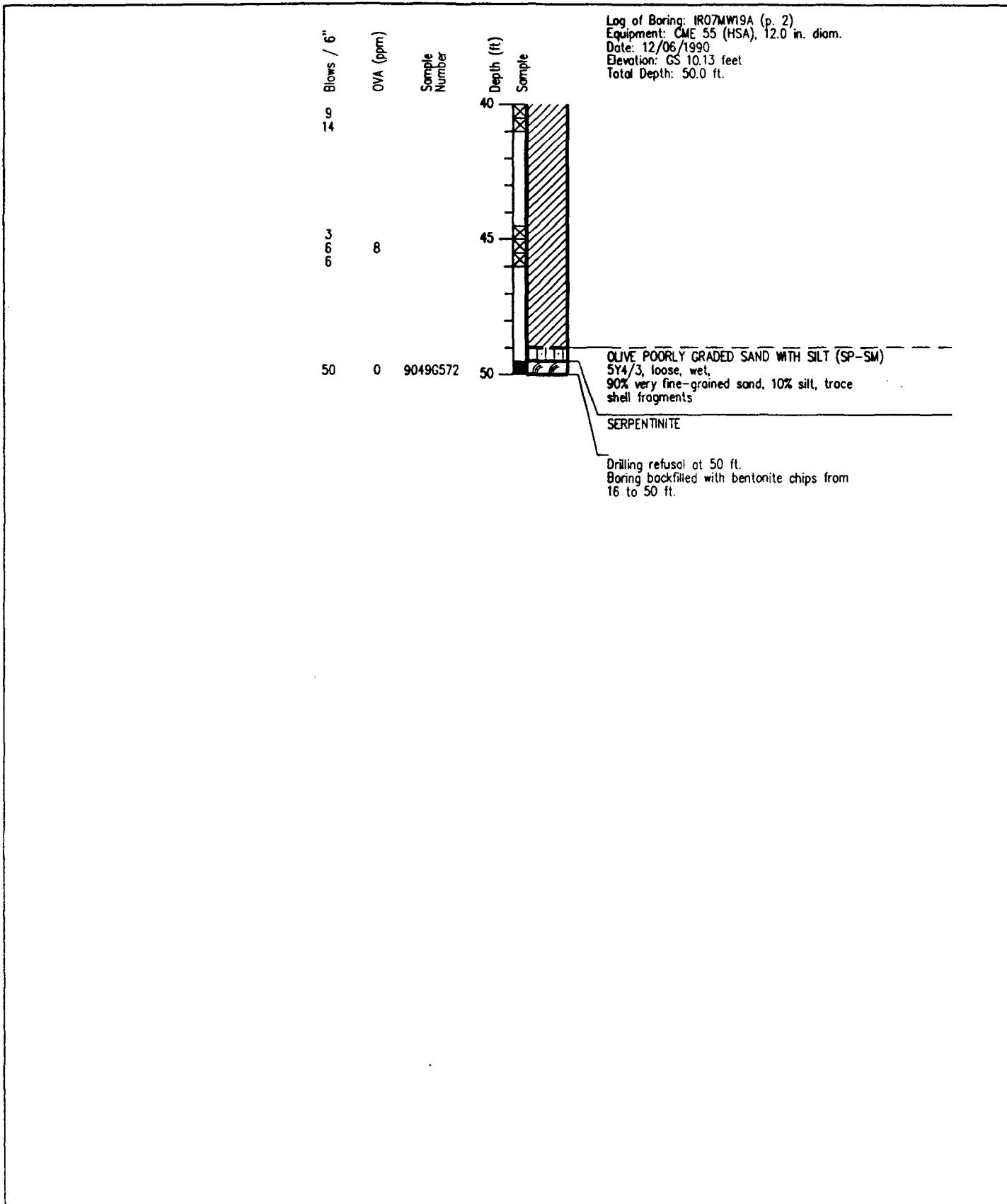
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PLATE

B28b

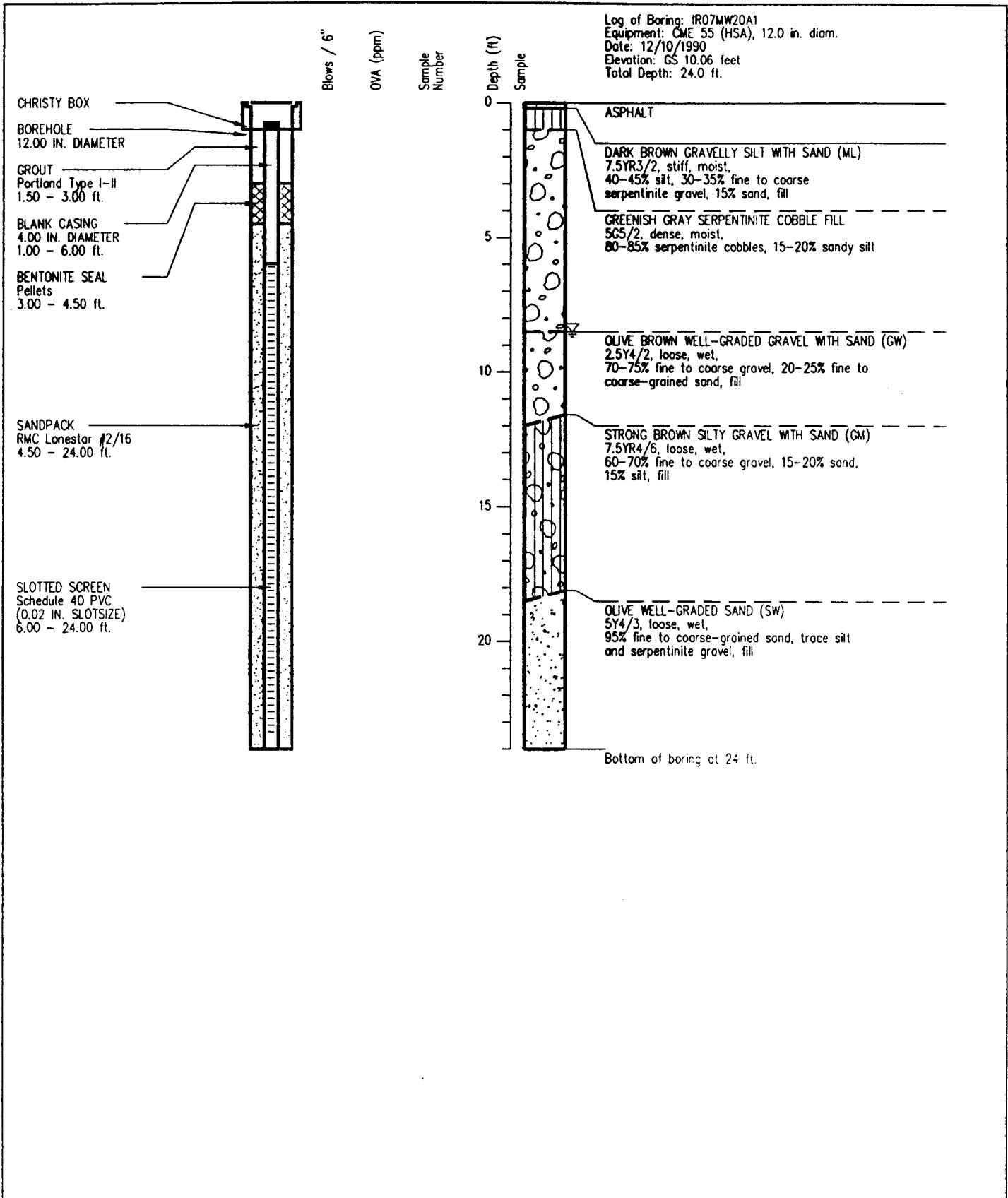
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PLATE

B29

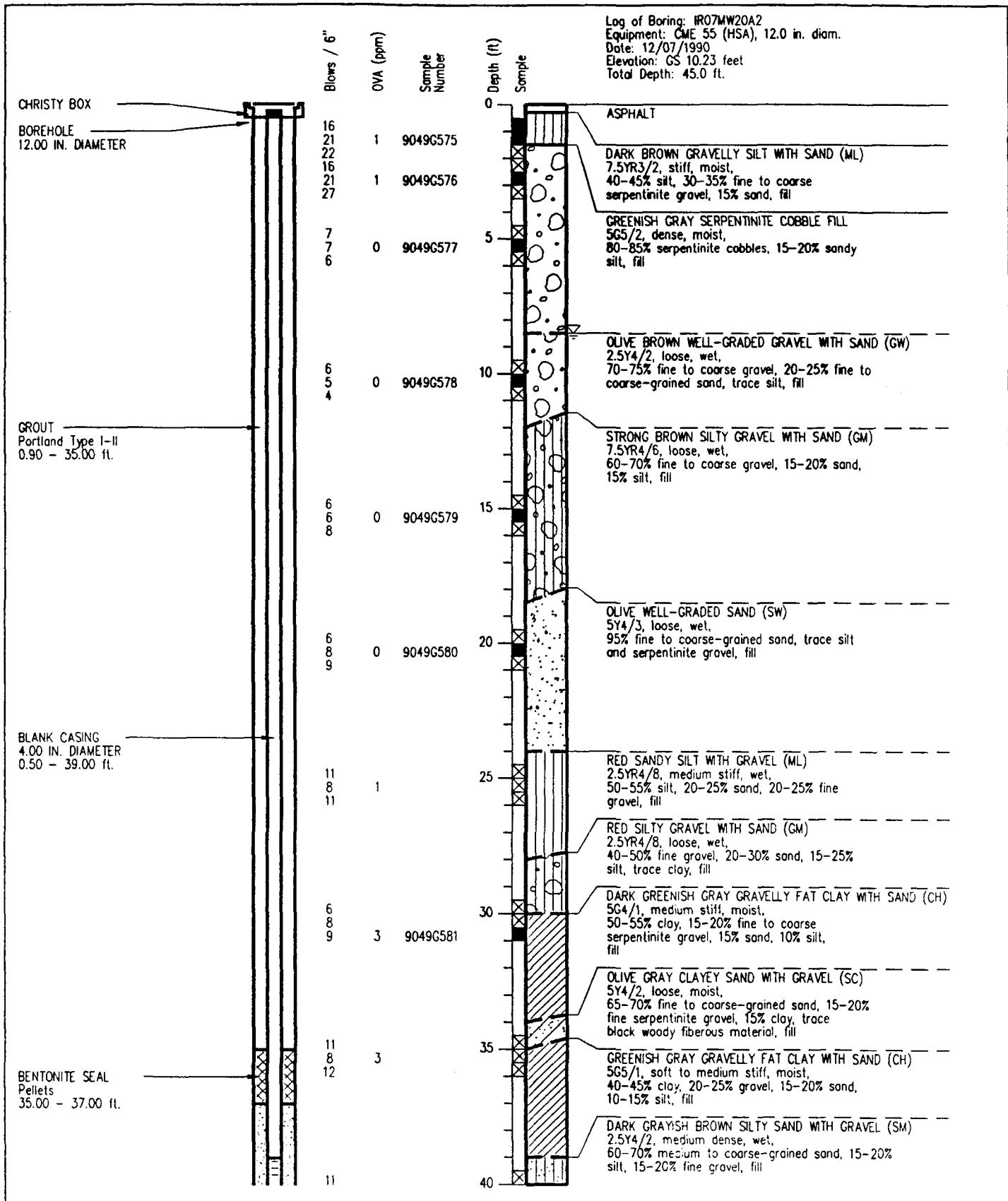
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JOB NUMBER
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PLATE

B30a

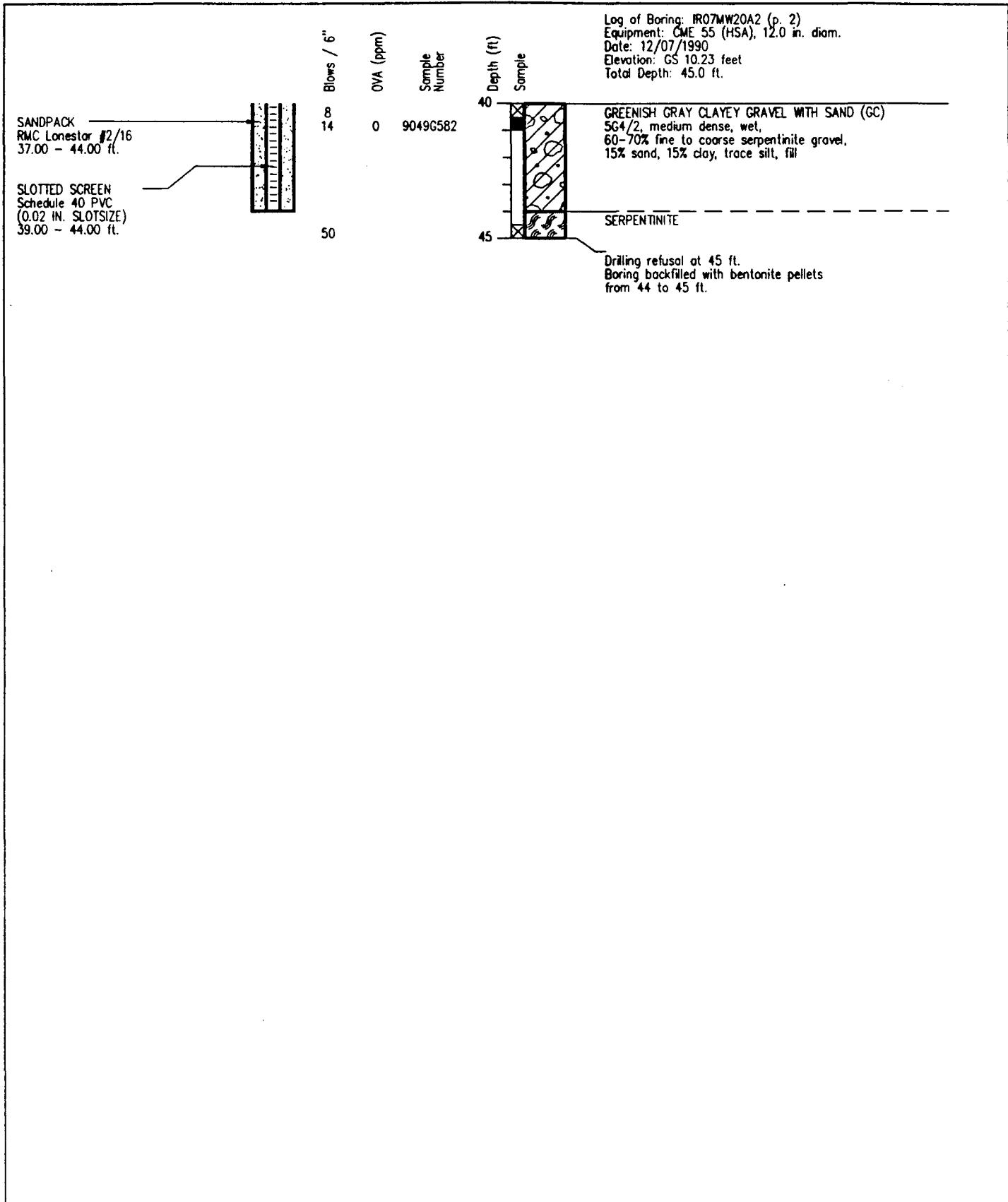
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Boring Log and Well Completion Detail: IR07MW20A2
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B30b

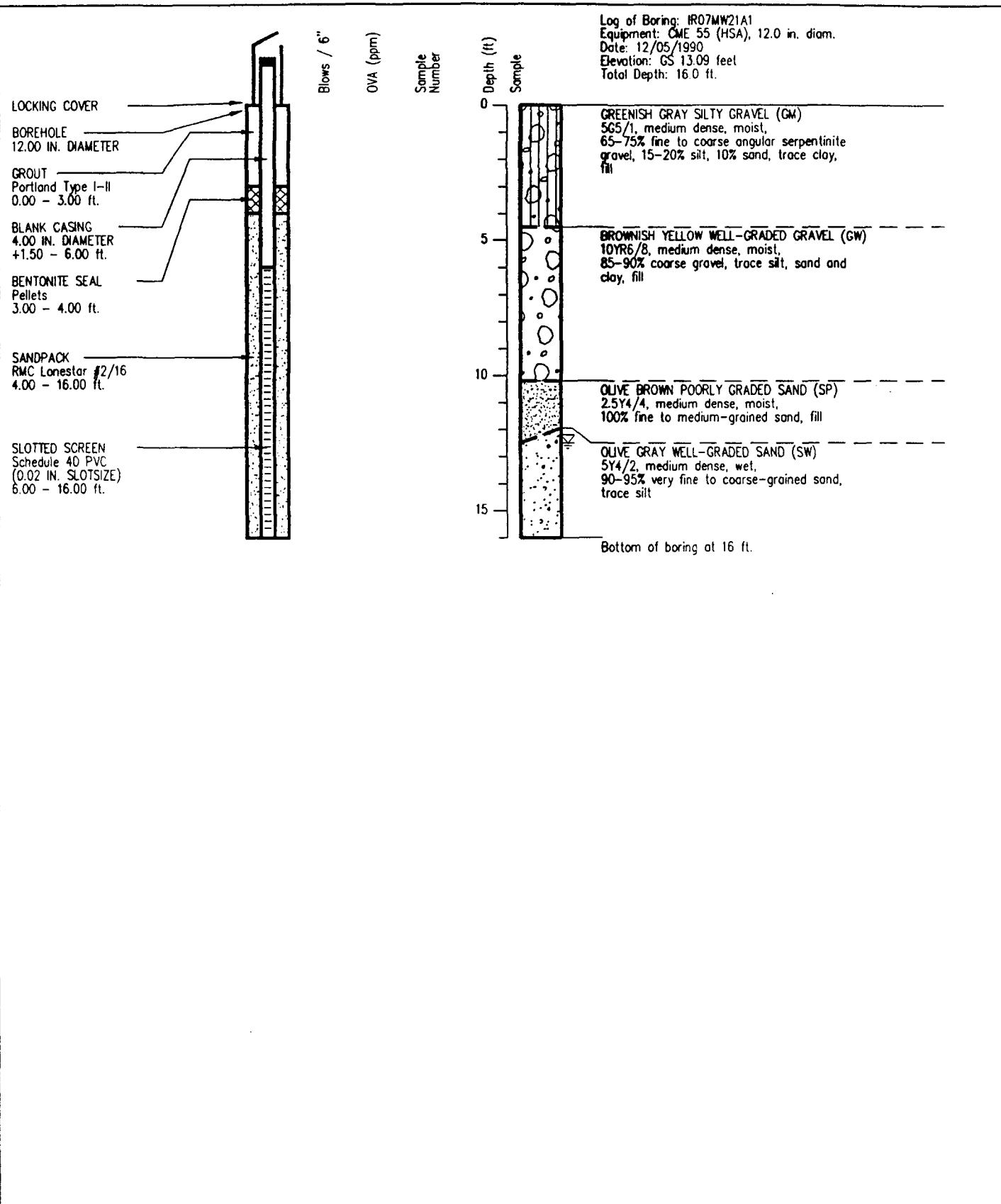
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Boring Log and Well Completion Detail: IR07MW21A1
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PLATE

B31

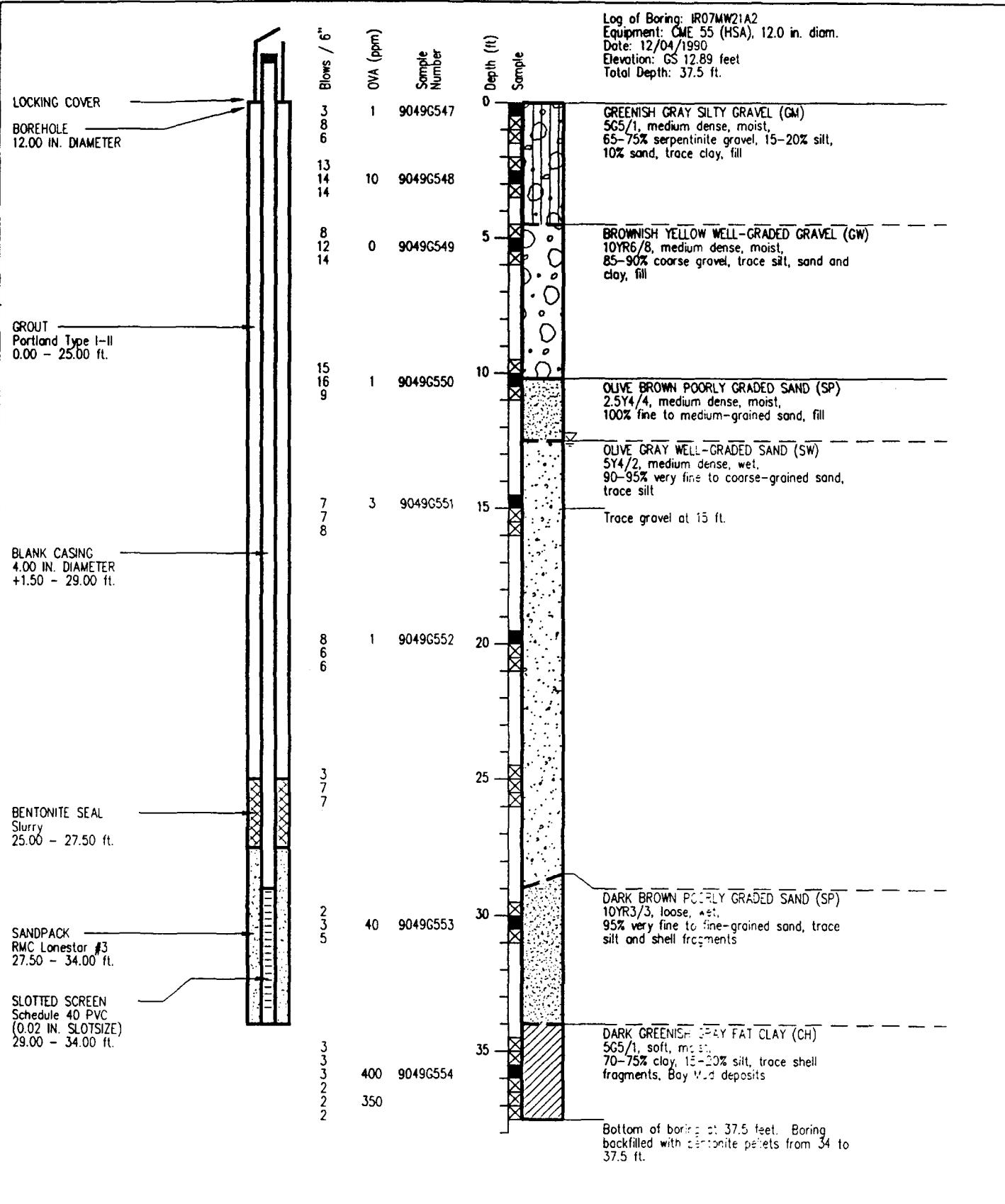
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Boring Log and Well Completion Detail: IR07MW21A2
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PLATE
B32

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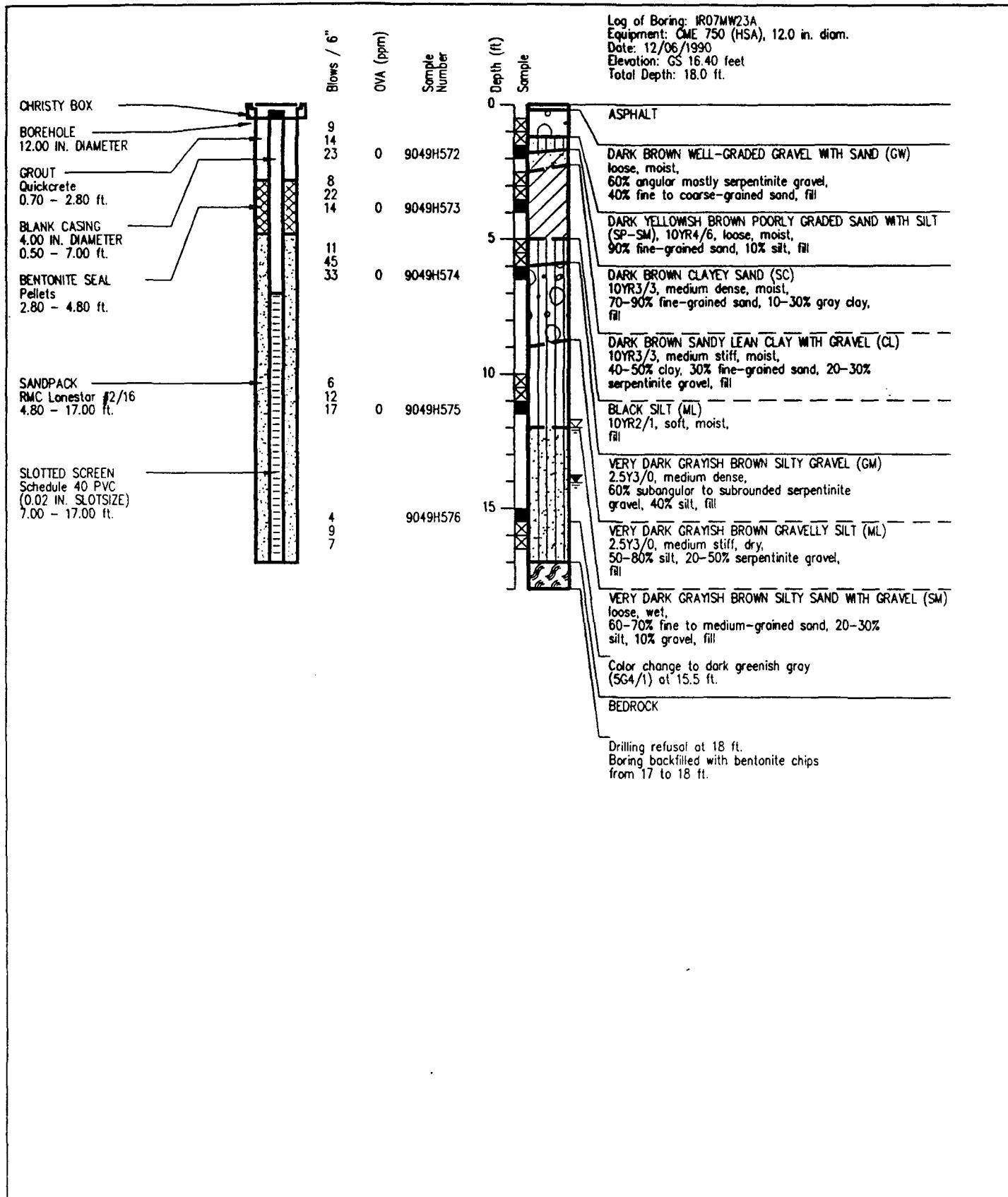
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Boring Log and Well Completion Detail: IR07MW23A
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PLATE

B33

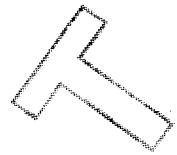
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JOB NUMBER
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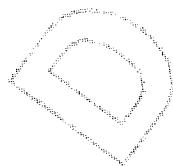
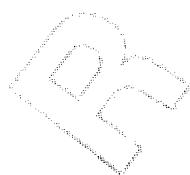
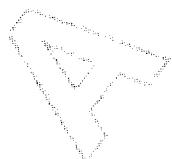
DATE
5/91

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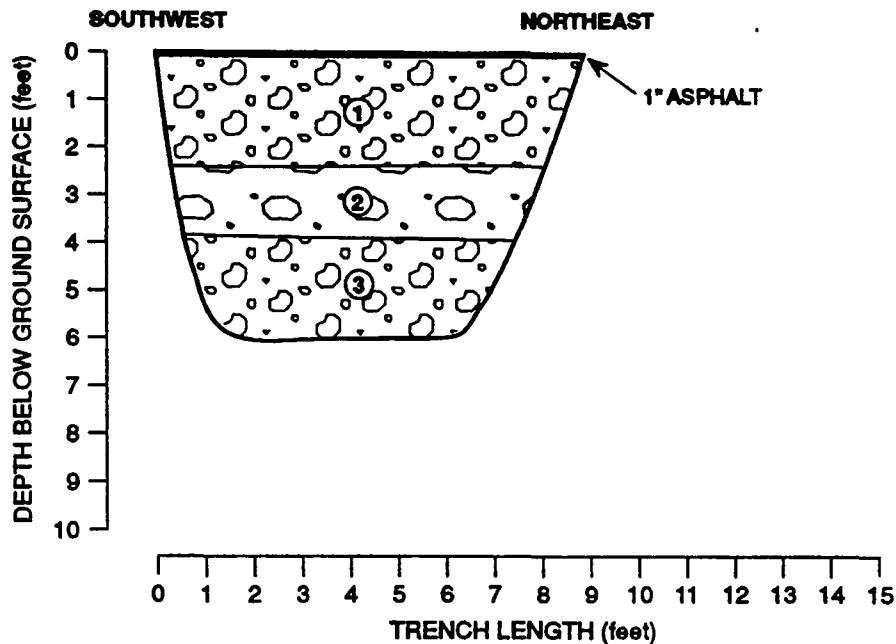
Appendix C

TEST PIT LITHOLOGIC LOGS



Trench #: IR07TA05A
Site #: IR07
Logged by: Rob Nelson
Started: 6-21-91
Completed: 6-21-91
Trench Orientation: N40E

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.1' thick
- ① DARK GRAY WELL-GRADED GRAVEL WITH SAND (GW)
5GY 4/1, 60% subangular serpentinite gravel, 40% fine- to coarse-grained sand, trace brick, fill
- ② DARK GREENISH GRAY SERPENTINITE BOULDER FILL
5GY 4/1, 50% serpentinite boulders to 8", 30% serpentinite gravel, 20% sand
- ③ YELLOWISH BROWN WELL-GRADED GRAVEL WITH SAND (GW)
10YR 5/6, medium dense to dense, moist, 65% subangular sandstone gravel, 35% fine- to medium-grained sand, trace brick, fill

1204LZ

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Log of Test Pit: IR07TA05A
Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
San Francisco, California

PLATE

C1

DRAWN
LZc

JOB NUMBER
18639,490.02

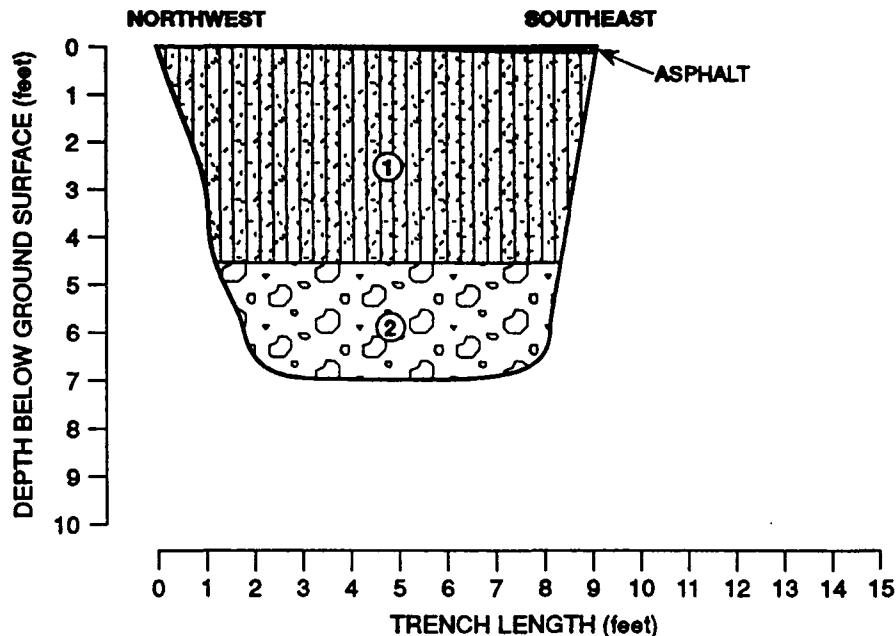
APPROVED

DATE
11/91

REVISED DATE

Trench #: IR07TA05B
Site #: IR07
Logged by: Gary Thomas
Started: 6-25-91
Completed: 6-25-91
Trench Orientation: N50W

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.0' to 0.2' thick
- ① OLIVE BROWN SILTY SAND WITH GRAVEL (SM)
2.5Y 4/4, medium dense, moist, 60-65% well-graded fine- to coarse-grained sand, 15-20% fine to coarse serpentinite gravel, 15-20% silt, trace wire and wood debris, fill
Color change to dark olive gray (5Y 3/2) at 2.5 ft
- ② OLIVE YELLOW WELL-GRADED GRAVEL WITH SAND (GW)
2.5Y 6/8, dense, moist, 60-70% fine to coarse mostly serpentinite gravel, 25-30% well-graded fine- to coarse-grained sand, 5% silt, fill

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Sub-Base Area, IR-7
Primary Phase Remedial Investigation
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San Francisco, California

C2

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JOB NUMBER
18639,490.02

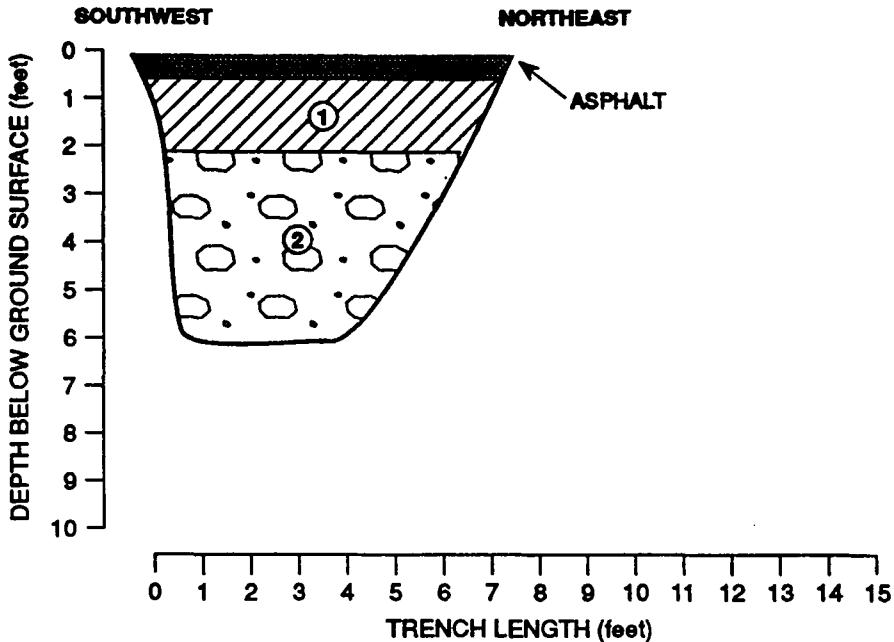
APPROVED

DATE
11/91

REVISED DATE

Trench #: IR07TA06
Site #: IR07
Logged by: Rob Nelson
Started: 6-3-91
Completed: 6-3-91
Trench Orientation: N40E

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.5' thick
- (1) DARK REDDISH BROWN LEAN CLAY WITH GRAVEL (CL)
5YR 3/2, stiff, moist, 75% clay, 20% subangular sandstone gravel, 5% fine-grained sand, fill
Color mottled with olive-brown (2.5Y 4/4) from 0.5 to 2.2 ft
- (2) OLIVE SERPENTINITE BOULDER FILL
5Y 4/4, 50% subangular sandstone boulders, 40% subangular sandstone gravel, 10% medium- to coarse-grained sand, trace silt and clay

1204LZ

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Log of Test Pit: IR07TA06
Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
San Francisco, California

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JOB NUMBER
18639,490.02

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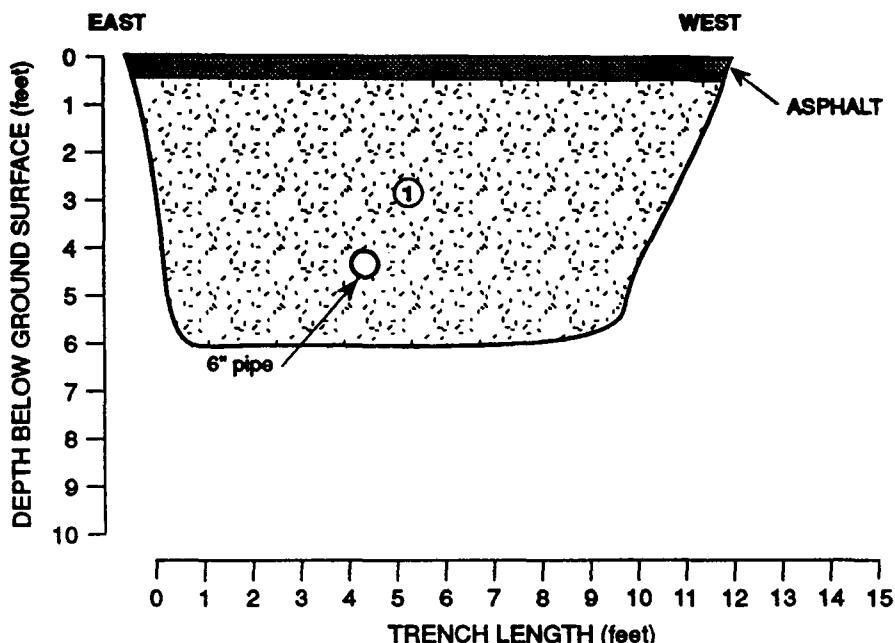
DATE
11/91

REVISED DATE

C3

Trench #: IR07TA07
Site #: IR07
Logged by: Rob Nelson
Started: 6-4-91
Completed: 6-4-91
Trench Orientation: N70W

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.5 ' thick
- DARK YELLOWISH BROWN WELL-GRADED SAND WITH GRAVEL (SW)
10YR 3/4, medium dense, moist, 50% fine- to coarse-grained sand,
40% subrounded sandstone gravel, 10% cobbles and boulders, fill

1204LZ

PLATE



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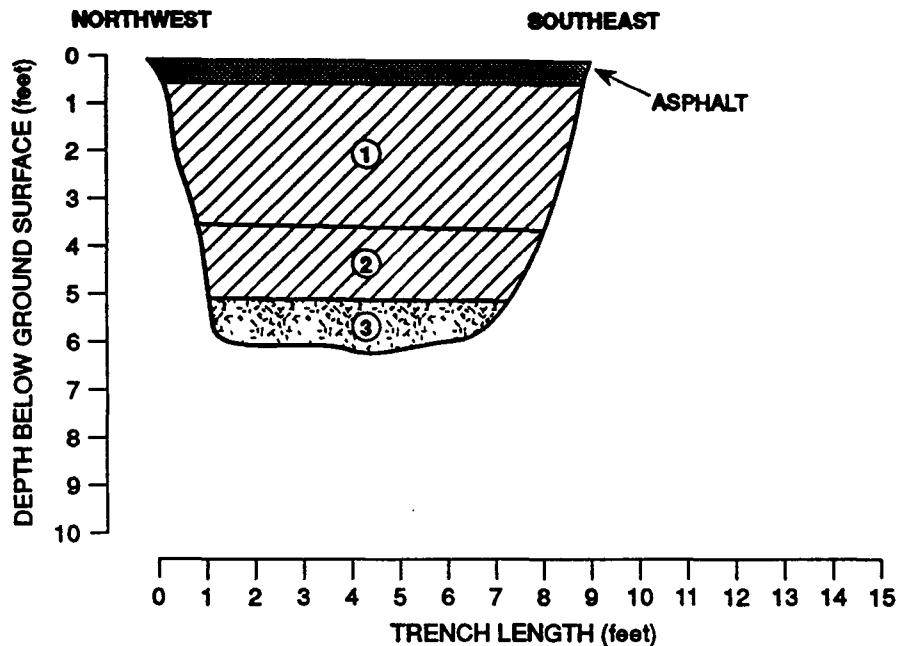
Log of Test Pit: IR07TA07
Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
San Francisco, California

C4

DRAWN LZc	JOB NUMBER 18639,490.02	APPROVED	DATE 11/91	REVISED DATE
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Trench #: IR07TA08A
Site #: IR07
Logged by: Rob Nelson
Started: 6-3-91
Completed: 6-3-91
Trench Orientation: N30E

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.6' thick
- ① DARK OLIVE GRAY GRAVELLY LEAN CLAY (CL)
5Y 3 1/2, medium stiff, moist, 60% clay, 35% sandstone gravel,
5% sand, fill
- ② DARK YELLOWISH BROWN GRAVELLY LEAN CLAY WITH SAND (CL)
10YR 4 1/4, medium stiff, moist, 50% clay, 30% sandstone gravel,
20% fine- to medium-grained sand, fill
- ③ OLIVE-BROWN POORLY GRADED SAND (SP)
2.5Y 4 1/3, loose, moist, 95% fine- to medium-grained sand,
5% clay, fill

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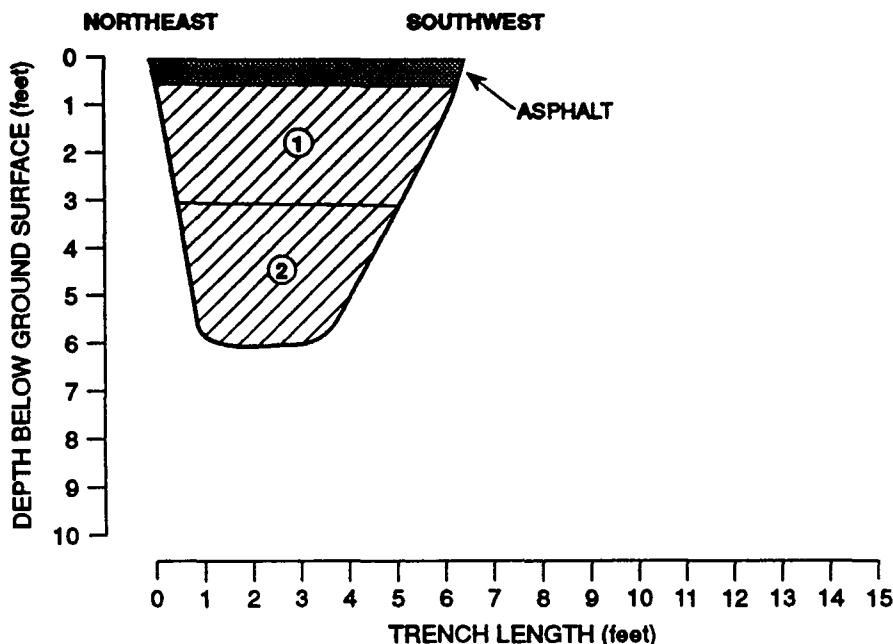
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Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
San Francisco, California

C5

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
LZc	18639,490.02		11/91	

Trench #: IR07TA08B
Site #: IR07
Logged by: Rob Nelson
Started: 6-3-91
Completed: 6-3-91
Trench Orientation: N30E

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.5' thick
- (1) DARK OLIVE GRAY GRAVELLY LEAN CLAY (CL)
5Y 3/2, medium stiff, moist, 60% clay, 35% sandstone and serpentine gravel, 5% sand, fill
- (2) DARK YELLOWISH BROWN GRAVELLY LEAN CLAY WITH SAND (CL)
10YR 4/4, medium stiff, moist, 50% clay, 30% sandstone gravel, 20% fine- to medium-grained sand, fill

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Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
San Francisco, California

C6

DRAWN
LZC

JOB NUMBER
18639,490.02

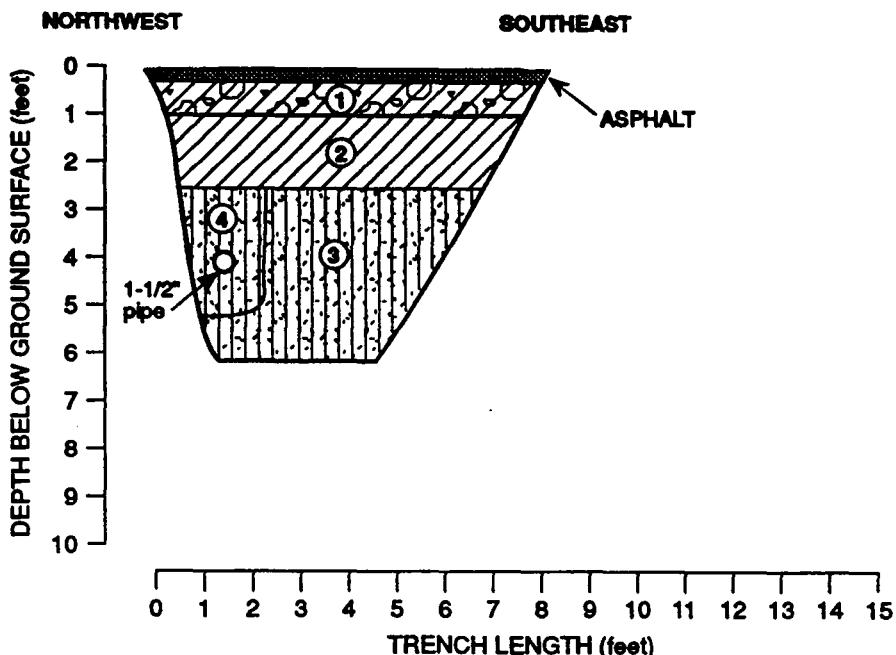
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REVISED DATE

Trench #: IR07TA09A
Site #: IR07
Logged by: Rob Nelson
Started: 6-3-91
Completed: 6-3-91
Trench Orientation: N50W

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.25' thick
- ① DARK GRAYISH BROWN CLAYEY GRAVEL WITH SAND (GC)
5YR 3/3, medium dense, moist to dry, 60% subangular sandstone gravel, 20% sand, 20% clay, fill
- ② DARK OLIVE GRAY LEAN CLAY WITH SAND (CL)
5Y 3/2, soft, moist, 75% clay, 25% fine-grained sand
- ③ DARK YELLOWISH BROWN SILTY SAND (SM)
10YR 3/4, medium dense, moist, 80% sand, 20% silt, fill
- ④ LIGHT OLIVE BROWN SILTY SAND (SM)
2.5Y 5/4, loose, moist, 85% sand, 15% silt, fill

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Sub-Base Area, IR-7
Primary Phase Remedial Investigation
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San Francisco, California

PLATE

C7

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JOB NUMBER
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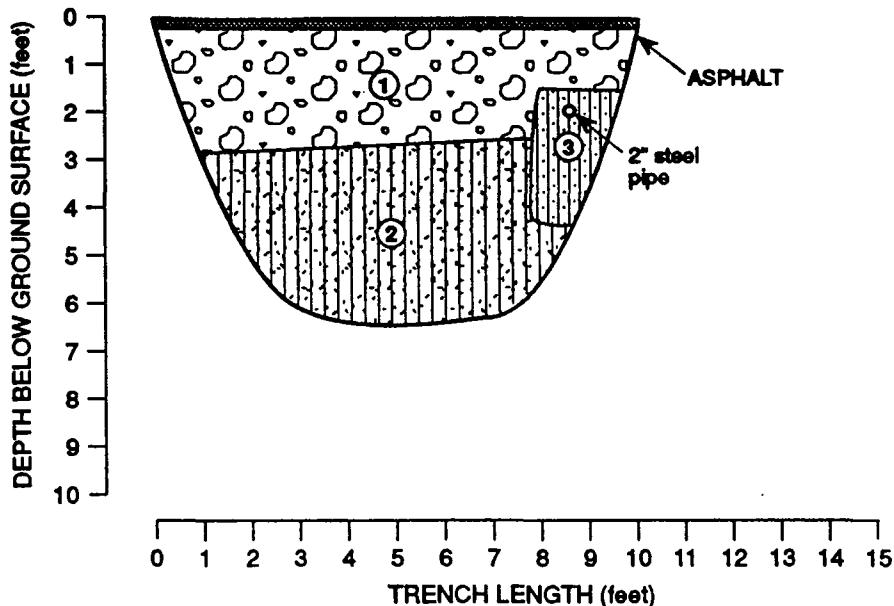
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DATE
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REVISED DATE

Trench #: IR07TA09B
Site #: IR07
Logged by: Rob Nelson
Started: 6-3-91
Completed: 6-3-91
Trench Orientation: N50W

TRENCH DIAGRAM



DESCRIPTION:

- ASPHALT 0.2' thick
- ① DARK REDDISH BROWN CLAYEY GRAVEL WITH SAND (GC)
5YR 3/3, medium dense, moist to dry, 60% subangular sandstone gravel, 20% medium- to fine-grained sand, 20% clay, fill
- ② DARK GREENISH GRAY SILTY SAND WITH GRAVEL (SM)
5G 4/1, medium dense, moist, 60% sand, 20% deeply weathered serpentinite gravel, 20% silt, fill
- ③ LIGHT OLIVE BROWN POORLY GRADED SAND WITH SILT (SP-SM)
2.5Y 5/4, loose, moist, 85% sand, 15% silt, fill

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Log of Test Pit: IR07TA09B
Sub-Base Area, IR-7
Primary Phase Remedial Investigation
Hunters Point Annex
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C8

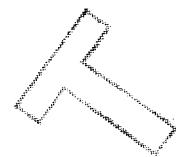
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JOB NUMBER
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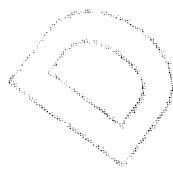
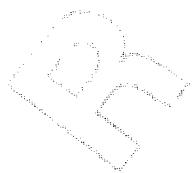
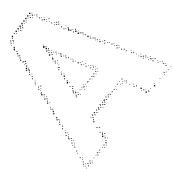
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DATE
11/91

REVISED DATE



Appendix D
ANALYTICAL METHODS



Appendix D
Analytical Methods (Soil and Sediment)

Parameter	Analytical Method	Reference
<u>Chemical Testing</u>		
Volatile Organic Compounds (VOCs)	CLP VOC	SOW 2/88 ¹
Semivolatile Organic Compounds (SOCs)	CLP SOC	SOW 2/88 ¹
Pesticides and Polychlorinated Biphenyls (PCBs)	CLP Pesticides/PCBs	SOW 2/88 ¹
Total Petroleum Hydrocarbons as Diesel	EXTN/GC-FID	LUFT ²
Total Petroleum Hydrocarbons as Gasoline	EPA 3550/GC-FID	SW-846 ³ /LUFT ²
Oil and Grease	EPA 9070	SW-846 ³
Metals (including Molybdenum)	CLP Metals	SOW 7/87 ⁴
Hexavalent Chromium	EPA 7196	SW-846 ³
pH	EPA 9045	SW-846 ³
<u>Physical Testing</u>		
Sieve Analyses	D-422	ASTM ⁵
Moisture content	D-2216	ASTM ⁵
Bulk Density (Wet/Dry)	App.H, Section 3	COE ⁶
Specific Gravity	D-854	ASTM ⁵
Porosity	App.II, Section 3	COE ⁶
Organic Content	D-2974	ASTM ⁵
Permeability	D-5084	ASTM ⁵

1 U.S. EPA. *Contract Laboratory Program, Statement of Work (SOW) for Organics Analysis*. February 1988.

2 State of California Leaking Underground Fuel Tank Task Force. *Leaking Underground Fuel Tank Manual. Guidelines for Site Assessment, Cleanup and Underground Storage Tank Closure*. May 1988.

3 U.S. EPA. *Test Methods for Evaluating Solid Waste, SW-846, 3rd Edition*. November 1986.

4 U.S. EPA. *Contract Laboratory Program, Statement or Work (SOW) for Inorganics Analysis*. July 1987.

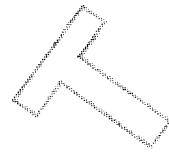
5 ASTM. *American Society for Testing and Material, Vol. 4.08*. 1991.

6 U.S. Army Corp of Engineers. *Lab Manual. 1110-2-1906 (81 Rev.)*

Appendix D
Analytical Methods (Groundwater)

Parameter	Analytical Method	Reference
Volatile Organic Compounds (VOCs)	CLP VOC	SOW 2/88 ¹
Semivolatile Organic Compounds (SOCs)	CLP SOC	SOW 2/88 ¹
Pesticides and Polychlorinated Biphenyls (PCBs)	CLP Pesticides/PCBs	SOW 2/88 ¹
Total Petroleum Hydrocarbons as Diesel	EXTN/GC-FID	LUFT ²
Total Petroleum Hydrocarbons as Gasoline	EPA 3510/GC-FID	SW-846 ³ /LUFT ²
Oil and Grease	EPA 9071	SW-846 ³
CLP Metals (including Molybdenum)	CLP Metals	SOW 7/87 ⁴
Hexavalent Chromium	EPA 7196	SW-846 ³
Total Dissolved Solids (third round only)	EPA 160.1	EPA 600/4-79-020 ⁵
Major Anions (Cl, NO ₃ -N, PO ₄ -P, SO ₄ ; first round only)	EPA 300.0	EPA 600/4-84-017 ⁶

- 1 U.S. EPA. *Contract Laboratory Program. Statement of Work (SOW) for Organics Analysis.* February 1988.
- 2 State of California Leaking Underground Fuel Tank Task Force. *Leaking Underground Fuel Tank Manual: Guidelines for Site Assessment, Cleanup and Underground Storage Tank Closure.* May 1988.
- 3 U.S. EPA. *Test Methods for Evaluating Solid Waste, SW-846, 3rd Edition.* November 1986.
- 4 U.S. EPA. *Contract Laboratory Program. Statement of Work (SOW) for Inorganics Analysis.* July 1987.
- 5 U.S. EPA. *Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020.* March 1983.
- 6 U.S. EPA. *Test Method, The Determination of Inorganics Anions in Water by Ion Chromatography-Method 300.0 EPA 600/4-84-017.* March 1984.



Appendix E
CHEMICAL ANALYTICAL RESULTS

The tables contain only those compounds with values reported above the detection or reporting limit for at least one sample. Compounds not detected in a sample are noted ND, and the reporting limit for the specific sample appears in the tables. All analytical results for the soil samples are presented on a dry weight basis. Laboratory and cursory validation qualifiers of the laboratory results are presented in the tables to provide quality control screening of the analytical data.

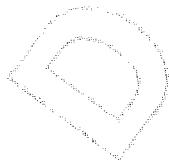


Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Page 1

Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	1.75	3.75	6.25	10.25
Sample Number:	9132H774	9132H775	9132H776	9132H777
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210001SA	0597210002SA	0597210003SA	0597210004SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
1,1-Dichloroethene	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Chloroform	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Methyl ethyl ketone	ug/kg	ND(11) A	ND(10) A	ND(10) A	ND(10) J3
1,1,1-Trichloroethane	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Trichloroethene	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Benzene	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Bromoform	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(10) A	ND(10) A	ND(10) J3
2-Hexanone	ug/kg	ND(11) A	ND(10) A	ND(10) A	ND(10) J3
Toluene	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Chlorobenzene	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
Xylenes	ug/kg	ND(5) A	ND(5) A	ND(5) A	ND(5) J3
CLP-SOC					
4-Methylphenol	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
n-Nitrosodipropylamine	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Benzoic acid	ug/kg	ND(3400) A	ND(6500) A	ND(3300) A	ND(3300) A
Naphthalene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
2-Methylnaphthalene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Dimethyl phthalate	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Acenaphthene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Dibenzofuran	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Diethyl phthalate	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Fluorene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
n-Nitrosodiphenylamine	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Phenanthrene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	290 A/J
Anthracene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Fluoranthene	ug/kg	71 A/J	ND(1300) A	ND(690) A	ND(690) A
Pyrene	ug/kg	97 A/J	ND(1300) A	120 A/J	ND(690) A
Benzo(a)anthracene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Chrysene	ug/kg	ND(700) A	150 A/J	ND(690) A	400 A/J
Di-n-octylphthalate	ug/kg	ND(700) A	ND(1300) A	1000 A	ND(690) A
Benzo(b)fluoranthene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Benzo(k)fluoranthene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A

Notes:

Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Page 2

Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	1.75	3.75	6.25	10.25
Sample Number:	9132H774	9132H775	9132H776	9132H777
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210001SA	0597210002SA	0597210003SA	0597210004SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Dibenzo(a,h)anthracene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
Benzo(ghi)perylene	ug/kg	ND(700) A	ND(1300) A	ND(690) A	ND(690) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(43) J5	ND(82) R1	ND(83) R1	ND(82) J5
Dieldrin	ug/kg	ND(85) J5	ND(160) R1	ND(170) R1	ND(160) J5
4,4'-DDE	ug/kg	ND(85) J5	ND(160) R1	ND(170) R1	ND(160) J5
Endrin	ug/kg	ND(85) J5	ND(160) R1	ND(170) R1	ND(160) J5
4,4'-DDD	ug/kg	ND(85) J5	ND(160) R1	ND(170) R1	ND(160) J5
4,4'-DDT	ug/kg	ND(85) J5	ND(160) R1	ND(170) R1	ND(160) J5
Methoxychlor	ug/kg	ND(430) J5	ND(820) R1	ND(830) R1	ND(820) J5
Aroclor-1260	ug/kg	ND(850) J5	ND(1600) R1	ND(1700) R1	ND(1600) J5
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11) A	ND(100) A	ND(10) A	ND(100) A
TPH-Extractable Unknown Hydrocarbon	mg/kg	36 A/d	ND(100) A/R	80 A/d	470 A/Rd
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	ND(1) A	ND(1) A	ND(1) A
OIL & GREASE					
Total Oil & Grease	mg/kg	1500 A	NA	5900 A	27000 A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Page 3

Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	16.25	20.75	26.25	31.25
Sample Number:	9132H778	9132H779	9132H780	9132H781
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210005SA	0597210006SA	0597210007SA	0597210015SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	4	A/J	2	A/J	9	A	8	A
1,1-Dichloroethene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Chloroform	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Methyl ethyl ketone	ug/kg	ND(12)	A	4	A/J	6	A/J	ND(13)	A
1,1,1-Trichloroethane	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Trichloroethene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Benzene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Bromoform	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Methyl isobutyl ketone	ug/kg	ND(12)	A	ND(13)	A	ND(13)	A	ND(13)	A
2-Hexanone	ug/kg	ND(12)	A	ND(13)	A	ND(13)	A	ND(13)	A
Toluene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Chlorobenzene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Xylenes	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
n-Nitrosodipropylamine	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Benzoic acid	ug/kg	ND(3800)	A	ND(4200)	A	ND(2100)	A	ND(2100)	A
Naphthalene	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
2-Methylnaphthalene	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Dimethyl phthalate	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Acenaphthene	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Dibenzofuran	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Diethyl phthalate	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Fluorene	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
n-Nitrosodiphenylamine	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Phenanthrene	ug/kg	ND(780)	A	700	A/J	ND(420)	A	ND(420)	A
Anthracene	ug/kg	ND(780)	A	270	A/J	ND(420)	A	ND(420)	A
Fluoranthene	ug/kg	ND(780)	A	1500	A	ND(420)	A	ND(420)	A
Pyrene	ug/kg	130	A/J	2400	A	ND(420)	A	ND(420)	A
Benzo(a)anthracene	ug/kg	ND(780)	A	820	A/J	ND(420)	A	ND(420)	A
Chrysene	ug/kg	89	A/J	1100	A	ND(420)	A	ND(420)	A
Di-n-octylphthalate	ug/kg	ND(780)	A	ND(870)	A	ND(420)	A	ND(420)	A
Benzo(b)fluoranthene	ug/kg	ND(780)	A	1100	A	ND(420)	A	ND(420)	A
Benzo(k)fluoranthene	ug/kg	ND(780)	A	440	A/J	ND(420)	A	ND(420)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	16.25	20.75	26.25	31.25
Sample Number:	9132H778	9132H779	9132H780	9132H781
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210005SA	0597210006SA	0597210007SA	0597210015SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(780)	A	980	A	ND(420)	A	ND(420)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(780)	A	480	A/J	ND(420)	A	ND(420)	A
Dibenzo(a,h)anthracene	ug/kg	ND(780)	A	91	A/J	ND(420)	A	ND(420)	A
Benzo(ghi)perylene	ug/kg	ND(780)	A	570	A/J	ND(420)	A	ND(420)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		NA		NA	
Dieldrin	ug/kg	NA		NA		NA		NA	
4,4'-DDE	ug/kg	NA		NA		NA		NA	
Endrin	ug/kg	NA		NA		NA		NA	
4,4'-DDD	ug/kg	NA		NA		NA		NA	
4,4'-DDT	ug/kg	NA		NA		NA		NA	
Methoxychlor	ug/kg	NA		NA		NA		NA	
Aroclor-1260	ug/kg	NA		NA		NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		NA		NA	
OIL & GREASE	mg/kg	NA		NA		NA		NA	
Total Oil & Grease	mg/kg	NA		NA		NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B002	IR07B002
Sample Depth(feet):	1.25	3.25	5.75	10.75
Sample Number:	9049P100	9049P101	9049P102	9049P103
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012069-06A	9012069-07A	9012069-08A	9012069-09A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Chloroform	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(11) R1J3/U	ND(11) R1/U	ND(11) R1/U	ND(11) R1/U
1,1,1-Trichloroethane	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Trichloroethene	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Benzene	ug/kg	ND(2) U1J35/B	ND(5) U1J5/BJ	ND(2) U1J5/J	ND(6) R1/U
Bromoform	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(11) R1J3/U	ND(11) R1/U	ND(11) R1/U	ND(11) R1/U
2-Hexanone	ug/kg	ND(11) R1J3/U	ND(11) R1/U	ND(11) R1/U	ND(11) R1/U
Toluene	ug/kg	ND(9) U1J35/B	ND(12) U1J5/B	ND(20) U1J5	ND(7) U1J5/B
Chlorobenzene	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
Xylenes	ug/kg	ND(6) R1J3/U	ND(5) R1/U	ND(6) R1/U	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
n-Nitrosodipropylamine	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Benzoic acid	ug/kg	ND(1900) J5/U	ND(19000) J5/U	ND(19000) J5/U	ND(2000) J5/U
Naphthalene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
2-Methylnaphthalene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Dimethyl phthalate	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Acenaphthene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Dibenzofuran	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Diethyl phthalate	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Fluorene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
n-Nitrosodiphenylamine	ug/kg	ND(400) J5/U	2300 J5/J	ND(4000) J5/U	ND(400) J5/U
Phenanthrene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Anthracene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Fluoranthene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Pyrene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Benzo(a)anthracene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Chrysene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Di-n-octylphthalate	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Benzo(b)fluoranthene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U
Benzo(k)fluoranthene	ug/kg	ND(400) J5/U	ND(3800) J5/U	ND(4000) J5/U	ND(400) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B002	IR07B002
Sample Depth(feet):	1.25	3.25	5.75	10.75
Sample Number:	9049P100	9049P101	9049P102	9049P103
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012069-06A	9012069-07A	9012069-08A	9012069-09A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(400)	J5/U	ND(3800)	J5/U	ND(4000)	J5/U	ND(400)	J5/U
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(400)	J5/U	ND(3800)	J5/U	ND(4000)	J5/U	ND(400)	J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(400)	J5/U	ND(3800)	J5/U	ND(4000)	J5/U	ND(400)	J5/U
Benzo(ghi)perylene	ug/kg	ND(400)	J5/U	ND(3800)	J5/U	ND(4000)	J5/U	ND(400)	J5/U
CLP-PEST/PCB									
Aldrin	ug/kg	ND(35)	R2J5/U	ND(34)	J5/U	ND(35)	J5/U	ND(36)	J5/U
Dieldrin	ug/kg	ND(70)	R2J5/U	ND(68)	J5/U	ND(71)	J5/U	ND(72)	J5/U
4, 4'-DDE	ug/kg	ND(70)	R2J5/U	ND(68)	J5/U	ND(71)	J5/U	ND(72)	J5/U
Endrin	ug/kg	ND(70)	R2J5/U	ND(68)	J5/U	ND(71)	J5/U	ND(72)	J5/U
4, 4'-DDD	ug/kg	ND(70)	R2J5/U	ND(68)	J5/U	ND(71)	J5/U	ND(72)	J5/U
4, 4'-DDT	ug/kg	ND(70)	R2J5/U	ND(68)	J5/U	ND(71)	J5/U	ND(72)	J5/U
Methoxychlor	ug/kg	ND(350)	R2J5/U	ND(340)	J5/U	ND(350)	J5/U	ND(360)	J5/U
Aroclor-1260	ug/kg	ND(700)	R2J5/U	ND(680)	J5/U	ND(710)	J5/U	ND(720)	J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	ND(26)	J5/U	ND(51)	J5/U	ND(55)	J5/U	ND(22)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(0.56)	J53/U	ND(0.53)	J53/U	ND(0.56)	J53/U	ND(0.55)	J53/U
OIL & GREASE									
Total Oil & Grease	mg/kg	2510	J5	5720	J5	1800	J5	ND(520)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.
ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B003	IR07B003
Sample Depth(feet):	15.75	20.75	1.75	3.75
Sample Number:	9049P104	9049P105	9132H802	9132H803
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	08/07/91	08/07/91
Lab Sample Number:	9012069-10A	9012070-01A	0597500009SA	0597500010SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Chloroform	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) R1/U	ND(41) U1J5/B	ND(11) A	ND(11) A
1,1,1-Trichloroethane	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Trichloroethene	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Benzene	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Bromoform	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) R1/U	ND(13) R1/U	ND(11) A	ND(11) A
2-Hexanone	ug/kg	ND(11) R1/U	ND(13) R1/U	ND(11) A	ND(11) A
Toluene	ug/kg	ND(3) U1J5/B/J	ND(7) R1/U	ND(5) A	ND(6) A
Chlorobenzene	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
Xylenes	ug/kg	ND(6) R1/U	ND(7) R1/U	ND(5) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
n-Nitrosodipropylamine	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Benzoic acid	ug/kg	ND(1800) J5/U	ND(21000) R1/U	ND(3500) A	ND(3500) A
Naphthalene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
2-Methylnaphthalene	ug/kg	ND(380) J5/U	ND(4300) R1/U	140 A/J	250 A/J
Dimethyl phthalate	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Acenaphthene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Dibenzofuran	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Diethyl phthalate	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(190) U1/J	ND(150) U1/J
Fluorene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
n-Nitrosodiphenylamine	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Phenanthrene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	82 A/J
Anthracene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Fluoranthene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	93 A/J
Pyrene	ug/kg	ND(380) J5/U	2400 J5/DJ	ND(720) A	110 A/J
Benzo(a)anthracene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Chrysene	ug/kg	ND(380) J5/U	1800 J5/DJ	ND(720) A	90 A/J
Di-n-octylphthalate	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A
Benzo(b)fluoranthene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	82 A/J
Benzo(k)fluoranthene	ug/kg	ND(380) J5/U	ND(4300) R1/U	ND(720) A	ND(730) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B003	IR07B003
Sample Depth(feet):	15.75	20.75	1.75	3.75
Sample Number:	9049P104	9049P105	9132H802	9132H803
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	08/07/91	08/07/91
Lab Sample Number:	9012069-10A	9012070-01A	0597500009SA	0597500010SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND (380)	J5/U	ND (4300)	R1/U	ND (720)	A	ND (730)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND (380)	J5/U	ND (4300)	R1/U	ND (720)	A	ND (730)	A
Dibenzo(a,h)anthracene	ug/kg	ND (380)	J5/U	ND (4300)	R1/U	ND (720)	A	ND (730)	A
Benzo(ghi)perylene	ug/kg	ND (380)	J5/U	ND (4300)	R1/U	ND (720)	A	ND (730)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND (87)	J5	ND (8.9)	J5
Dieldrin	ug/kg	NA		NA		ND (870)	J5/D	ND (18)	J5
4, 4'-DDE	ug/kg	NA		NA		540	J5/DJ	ND (18)	J5
Endrin	ug/kg	NA		NA		ND (870)	J5/D	ND (18)	J5
4, 4'-DDD	ug/kg	NA		NA		ND (870)	J5/D	ND (18)	J5
4, 4'-DDT	ug/kg	NA		NA		540	J5/DJ	ND (18)	J5
Methoxychlor	ug/kg	NA		NA		470	J5/DJ	ND (89)	J5
Aroclor-1260	ug/kg	NA		NA		ND (1700)	J5/D	ND (180)	J5
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND (11)	A	ND (11)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		ND (11)	A	ND (11)	A
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND (1.1)	A	ND (1.1)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		3200	A	400	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.
ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B003	IR07B003	IR07B003	IR07B004
Sample Depth(feet):	6.25	16.75	21.25	2.25
Sample Number:	9132H804	9132H805	9132H806	9133M152
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/08/91	08/13/91
Lab Sample Number:	0597500011SA	0597500012SA	0597500013SA	0598870009SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(12) A
1,1,1-Trichloroethane	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(12) A
2-Hexanone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(12) A
Toluene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Chlorobenzene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
n-Nitrosodipropylamine	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Benzoic acid	ug/kg	ND(3500) A	ND(1900) A	ND(2000) A	ND(2000) A
Naphthalene	ug/kg	80 A/J	ND(390) A	ND(410) A	ND(420) A
2-Methylnaphthalene	ug/kg	340 A/J	ND(390) A	ND(410) A	ND(420) A
Dimethyl phthalate	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Acenaphthene	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Dibenzofuran	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Diethyl phthalate	ug/kg	ND(190) U1/J	ND(390) A	ND(410) A	ND(54) U1/JB
Fluorene	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
n-Nitrosodiphenylamine	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Phenanthrene	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Anthracene	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Fluoranthene	ug/kg	110 A/J	ND(390) A	ND(410) A	ND(420) A
Pyrene	ug/kg	120 A/J	ND(390) A	ND(410) A	ND(420) A
Benzo(a)anthracene	ug/kg	69 A/J	ND(390) A	ND(410) A	ND(420) A
Chrysene	ug/kg	100 A/J	ND(390) A	ND(410) A	ND(420) A
Di-n-octylphthalate	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A
Benzo(b)fluoranthene	ug/kg	80 A/J	ND(390) A	ND(410) A	ND(420) A
Benzo(k)fluoranthene	ug/kg	ND(720) A	ND(390) A	ND(410) A	ND(420) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B003	IR07B003	IR07B003	IR07B004
Sample Depth(feet):	6.25	16.75	21.25	2.25
Sample Number:	9132H804	9132H805	9132H806	9133M152
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/08/91	08/13/91
Lab Sample Number:	0597500011SA	0597500012SA	0597500013SA	0598870009SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	79	A/J	ND(390)	A	ND(410)	A	ND(420)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(720)	A	ND(390)	A	ND(410)	A	ND(420)	A
Dibenzo(a,h)anthracene	ug/kg	ND(720)	A	ND(390)	A	ND(410)	A	ND(420)	A
Benzo(ghi)perylene	ug/kg	ND(720)	A	ND(390)	A	ND(410)	A	ND(420)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(43)	J5	NA		NA		ND(9.3)	J5
Dieldrin	ug/kg	ND(87)	J5	NA		NA		ND(19)	J5
4,4'-DDE	ug/kg	ND(87)	J5	NA		NA		ND(19)	J5
Endrin	ug/kg	ND(87)	J5	NA		NA		ND(19)	J5
4,4'-DDD	ug/kg	ND(87)	J5	NA		NA		ND(19)	J5
4,4'-DDT	ug/kg	ND(87)	J5	NA		NA		ND(19)	J5
Methoxychlor	ug/kg	ND(430)	J5	NA		NA		ND(93)	J5
Aroclor-1260	ug/kg	ND(870)	J5	NA		NA		ND(190)	J5
TPH DIESEL									
TPH-Diesel	mg/kg	ND(11)	A	NA		NA		ND(12)	J5
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11)	A	NA		NA		ND(12)	J5
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	NA		NA		ND(1.2)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	2800	A	NA		NA		ND(58)	J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B004	IR07B004	IR07B004	IR07B004
Sample Depth(feet):	4.25	6.25	11.25	22.75
Sample Number:	9133M153	9133M154	9133M155	9133M156
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870010SA	0598870011SA	0598870012SA	0598870013SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	1	A/J	ND (6)	A	ND (6)	A	5	A/J
1,1-Dichloroethene	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Chloroform	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Methyl ethyl ketone	ug/kg	ND (11)	A	13	A	ND (13)	A	ND (13)	A
1,1,1-Trichloroethane	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Trichloroethene	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Benzene	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Bromoform	ug/kg	ND (6)	A	1	A/J	ND (6)	A	ND (6)	A
Methyl isobutyl ketone	ug/kg	ND (11)	A	ND (13)	A	ND (13)	A	ND (13)	A
2-Hexanone	ug/kg	ND (11)	A	ND (13)	A	ND (13)	A	ND (13)	A
Toluene	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Chlorobenzene	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
Xylenes	ug/kg	ND (6)	A	ND (6)	A	ND (6)	A	ND (6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
n-Nitrosodipropylamine	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Benzoic acid	ug/kg	ND (3600)	A	ND (2000)	A	ND (2100)	A	ND (2000)	A
Naphthalene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
2-Methylnaphthalene	ug/kg	ND (170)	U1/JB	ND (420)	A	ND (430)	A	ND (420)	A
Dimethyl phthalate	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Acenaphthene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Dibenzofuran	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Diethyl phthalate	ug/kg	ND (160)	U1/JB	ND (420)	A	ND (430)	A	ND (420)	A
Fluorene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
n-Nitrosodiphenylamine	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Phenanthrene	ug/kg	92	A/J	ND (420)	A	ND (430)	A	ND (420)	A
Anthracene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Fluoranthene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Pyrene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Benzo(a)anthracene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Chrysene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Di-n-octylphthalate	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Benzo(b)fluoranthene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A
Benzo(k)fluoranthene	ug/kg	ND (750)	A	ND (420)	A	ND (430)	A	ND (420)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B004	IR07B004	IR07B004	IR07B004
Sample Depth(feet):	4.25	6.25	11.25	22.75
Sample Number:	9133M153	9133M154	9133M155	9133M156
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870010SA	0598870011SA	0598870012SA	0598870013SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(750)	A	ND(420)	A	ND(430)	A	ND(420)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(750)	A	ND(420)	A	ND(430)	A	ND(420)	A
Dibenzo(a,h)anthracene	ug/kg	ND(750)	A	ND(420)	A	ND(430)	A	ND(420)	A
Benzo(ghi)perylene	ug/kg	ND(750)	A	ND(420)	A	ND(430)	A	ND(420)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(9.1)	R1J3	ND(10)	J5	ND(10)	J5	NA	
Dieldrin	ug/kg	ND(18)	R1J3	ND(20)	J5	ND(20)	J5	NA	
4,4'-DDE	ug/kg	6.4	J35/J	ND(20)	J5	ND(20)	J5	NA	
Endrin	ug/kg	ND(18)	R1J3	ND(20)	J5	ND(20)	J5	NA	
4,4'-DDD	ug/kg	ND(18)	R1J3	ND(20)	J5	ND(20)	J5	NA	
4,4'-DDT	ug/kg	22	J35	ND(20)	J5	ND(20)	J5	NA	
Methoxychlor	ug/kg	ND(91)	R1J3	ND(100)	J5	ND(100)	J5	NA	
Aroclor-1260	ug/kg	ND(1800)	R1J3/D	ND(200)	J5	ND(200)	J5	NA	
TPH DIESEL									
TPH-Diesel	mg/kg	49	J5	ND(13)	A	ND(13)	J5	NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11)	J5	ND(13)	A	ND(13)	J5	NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	ND(1.3)	A	ND(1.3)	A	NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	ND(57)	J5	ND(63)	J5	ND(65)	J5	NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B005	IR07B005	IR07B005	IR07B005
Sample Depth(feet):	1.75	3.75	6.25	11.25
Sample Number:	9132H782	9132H783	9132H784	9132H785
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210008SA	0597210009SA	0597210010SA	0597210011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) A	ND(11) A	20 A	23 A
1,1,1-Trichloroethane	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(11) A	ND(11) A	ND(12) A
2-Hexanone	ug/kg	ND(11) A	ND(11) A	ND(11) A	ND(12) A
Toluene	ug/kg	ND(6) A	ND(6) A	ND(6) A	1 A/J
Chlorobenzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
n-Nitrosodipropylamine	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
Benzoic acid	ug/kg	ND(3600) A	ND(1800) A	ND(1800) A	ND(1900) A
Naphthalene	ug/kg	ND(740) A	ND(370) A	ND(370) A	84 A/J
2-Methylnaphthalene	ug/kg	ND(740) A	36 A/J	ND(370) A	38 A/J
Dimethyl phthalate	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
Acenaphthene	ug/kg	ND(740) A	ND(370) A	ND(370) A	61 A/J
Dibenzofuran	ug/kg	ND(740) A	53 A/J	ND(370) A	ND(380) A
Diethyl phthalate	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
Fluorene	ug/kg	ND(740) A	ND(370) A	ND(370) A	72 A/J
n-Nitrosodiphenylamine	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
Phenanthrene	ug/kg	230 A/J	240 A/J	ND(370) A	580 A
Anthracene	ug/kg	ND(740) A	ND(370) A	ND(370) A	140 A/J
Fluoranthene	ug/kg	220 A/J	48 A/J	37 A/J	470 A
Pyrene	ug/kg	220 A/J	64 A/J	42 A/J	500 A
Benzo(a)anthracene	ug/kg	110 A/J	110 A/J	ND(370) A	270 A/J
Chrysene	ug/kg	190 A/J	160 A/J	36 A/J	370 A/J
Di-n-octylphthalate	ug/kg	ND(740) A	ND(370) A	ND(370) A	ND(380) A
Benzo(b)fluoranthene	ug/kg	200 A/J	88 A/J	37 A/J	310 A/J
Benzo(k)fluoranthene	ug/kg	ND(740) A	ND(370) A	ND(370) A	170 A/J

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B005	IR07B005	IR07B005	IR07B005
Sample Depth(feet):	1.75	3.75	6.25	11.25
Sample Number:	9132H782	9132H783	9132H784	9132H785
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210008SA	0597210009SA	0597210010SA	0597210011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	130 A/J	ND(370) A	ND(370) A	270 A/J
Indeno(1,2,3-cd)pyrene	ug/kg	ND(740) A	ND(370) A	ND(370) A	110 A/J
Dibenzo(a,h)anthracene	ug/kg	ND(740) A	ND(370) A	ND(370) A	37 A/J
Benzo(ghi)perylene	ug/kg	88 A/J	ND(370) A	ND(370) A	95 A/J
CLP-PEST/PCB					
Aldrin	ug/kg	ND(90) J5	ND(89) J5	ND(9.1) J5	ND(9.3) J5
Dieldrin	ug/kg	ND(180) J5	ND(180) J5	ND(18) J5	ND(19) J5
4,4'-DDE	ug/kg	ND(180) J5	ND(180) J5	4.4 J5/J	ND(19) J5
Endrin	ug/kg	ND(180) J5	ND(180) J5	ND(18) J5	ND(19) J5
4,4'-DDD	ug/kg	ND(180) J5	ND(180) J5	ND(18) J5	ND(19) J5
4,4'-DDT	ug/kg	ND(180) J5	ND(180) J5	ND(18) J5	ND(19) J5
Methoxychlor	ug/kg	ND(900) J5	ND(890) J5	ND(91) J5	ND(93) J5
Aroclor-1260	ug/kg	ND(1800) J5	ND(1800) J5	ND(180) J5	ND(190) J5
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11) A	94 A/1	ND(11) A	ND(12) A
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11) A	ND(11) A	ND(11) A	ND(12) A
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	ND(1.1) A	ND(1.1) A	ND(1.2) A
OIL & GREASE					
Total Oil & Grease	mg/kg	450 A	ND(56) A	68 A	79 A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.
ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
**Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B005	IR07B005	IR07B005	IR07B006
Sample Depth(feet):	16.25	21.25	31.75	1.25
Sample Number:	9132H786	9132H787	9132H788	9049P106
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	12/07/90
Lab Sample Number:	0597210012SA	0597210013SA	0597210014SA	9012070-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(7) A	ND(6) A	7 A/J	ND(5) R1/U
1,1-Dichloroethene	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Chloroform	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Methyl ethyl ketone	ug/kg	11 A/J	ND(12) A	5 A/J	ND(61) ULJ5/B
1,1,1-Trichloroethane	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Trichloroethene	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Benzene	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Bromoform	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Methyl isobutyl ketone	ug/kg	ND(14) A	ND(12) A	ND(16) A	ND(11) R1/U
2-Hexanone	ug/kg	ND(14) A	ND(12) A	ND(16) A	ND(11) R1/U
Toluene	ug/kg	ND(7) A	ND(6) A	ND(8) A	13 J5F
Chlorobenzene	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
Xylenes	ug/kg	ND(7) A	ND(6) A	ND(8) A	ND(5) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
n-Nitrosodipropylamine	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Benzoic acid	ug/kg	ND(2300) A	ND(2000) A	ND(2600) A	ND(18000) R1/U
Naphthalene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
2-Methylnaphthalene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Dimethyl phthalate	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Acenaphthene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Dibenzofuran	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Diethyl phthalate	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Fluorene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Phenanthrene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Anthracene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Fluoranthene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Pyrene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Benzo(a)anthracene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Chrysene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Di-n-octylphthalate	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Benzo(b)fluoranthene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Benzo(k)fluoranthene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B005	IR07B005	IR07B005	IR07B006
Sample Depth(feet):	16.25	21.25	31.75	1.25
Sample Number:	9132H786	9132H787	9132H788	9049P106
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	12/07/90
Lab Sample Number:	0597210012SA	0597210013SA	0597210014SA	9012070-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
Benzo(ghi)perylene	ug/kg	ND(460) A	ND(410) A	ND(530) A	ND(3700) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	NA	NA	NA	ND(16) R1/U
Dieldrin	ug/kg	NA	NA	NA	ND(33) R1/U
4,4'-DDE	ug/kg	NA	NA	NA	ND(33) R1/U
Endrin	ug/kg	NA	NA	NA	ND(33) R1/U
4,4'-DDD	ug/kg	NA	NA	NA	ND(33) R1/U
4,4'-DDT	ug/kg	NA	NA	NA	ND(33) R1/U
Methoxychlor	ug/kg	NA	NA	NA	ND(160) R1/U
Aroclor-1260	ug/kg	NA	NA	NA	ND(330) R1/U
TPH DIESEL					
TPH-Diesel	mg/kg	NA	NA	NA	ND(21) J35/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	NA	NA	NA	ND(0.54) J5/U
OIL & GREASE					
Total Oil & Grease	mg/kg	NA	NA	NA	970 J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B006	IR07B006	IR07B006	IR07B006
Sample Depth(feet):	4.25	6.25	10.75	15.75
Sample Number:	9049P107	9049P108	9049P109	9049P110
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012070-03A	9012070-04A	9012070-05A	9012070-06A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
1,1-Dichloroethene	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Chloroform	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Methyl ethyl ketone	ug/kg	ND (11) R1/U	ND (30) U1J5/B	ND (13) R1/U	ND (15) R1/U
1,1,1-Trichloroethane	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Trichloroethene	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Benzene	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Bromoform	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Methyl isobutyl ketone	ug/kg	ND (11) R1/U	ND (11) R1/U	ND (13) R1/U	ND (15) R1/U
2-Hexanone	ug/kg	ND (11) R1/U	ND (11) R1/U	ND (13) R1/U	ND (15) R1/U
Toluene	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Chlorobenzene	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
Xylenes	ug/kg	ND (6) R1/U	ND (5) R1/U	ND (7) R1/U	ND (8) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
n-Nitrosodipropylamine	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Benzoic acid	ug/kg	ND (1900) R1/U	ND (1900) R1/U	ND (2300) R1/U	ND (2300) R1/U
Naphthalene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
2-Methylnaphthalene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Dimethyl phthalate	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Acenaphthene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Dibenzofuran	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Diethyl phthalate	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Fluorene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
n-Nitrosodiphenylamine	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Phenanthrene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Anthracene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Fluoranthene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Pyrene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Benzo(a)anthracene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Chrysene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Di-n-octylphthalate	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Benzo(b)fluoranthene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U
Benzo(k)fluoranthene	ug/kg	ND (390) R1/U	ND (400) R1/U	ND (470) R1/U	ND (480) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B006	IR07B006	IR07B006	IR07B006
Sample Depth(feet):	4.25	6.25	10.75	15.75
Sample Number:	9049P107	9049P108	9049P109	9049P110
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012070-03A	9012070-04A	9012070-05A	9012070-06A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(390) R1/U	ND(400) R1/U	ND(470) R1/U	ND(480) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(390) R1/U	ND(400) R1/U	ND(470) R1/U	ND(480) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(390) R1/U	ND(400) R1/U	ND(470) R1/U	ND(480) R1/U
Benzo(ghi)perylene	ug/kg	ND(390) R1/U	ND(400) R1/U	ND(470) R1/U	ND(480) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(17) R1/U	ND(18) R1/U	ND(21) R1/U	NA
Dieldrin	ug/kg	ND(35) R1/U	ND(35) R1/U	ND(41) R1/U	NA
4,4'-DDE	ug/kg	ND(35) R1/U	ND(35) R1/U	ND(41) R1/U	NA
Endrin	ug/kg	ND(35) R1/U	ND(35) R1/U	ND(41) R1/U	NA
4,4'-DDD	ug/kg	ND(35) R1/U	ND(35) R1/U	ND(41) R1/U	NA
4,4'-DDT	ug/kg	ND(35) R1/U	ND(35) R1/U	ND(41) R1/U	NA
Methoxychlor	ug/kg	ND(170) R1/U	ND(180) R1/U	ND(210) R1/U	NA
Aroclor-1260	ug/kg	ND(350) R1/U	ND(350) R1/U	ND(410) R1/U	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(22) J35/U	ND(21) J35/U	ND(25) J35/U	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.56) J5/U	ND(0.55) J5/U	ND(0.65) J5/U	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(560) J5/U	ND(520) J5/U	ND(610) J5/U	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.
ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
**Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7**
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Station Number:	IR07B006	IR07B006	IR07B007	IR07B007
Sample Depth(feet):	20.25	30.75	1.75	3.75
Sample Number:	9049P111	9049P112	9049H566	9049H567
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/06/90	12/06/90
Lab Sample Number:	9012070-07A	9012070-08A	9012059-09A	9012059-10A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
1,1-Dichloroethene	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Chloroform	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Methyl ethyl ketone	ug/kg	ND (13)	R1/U	ND (17)	U1J5/B	ND (10)	R1/U	ND (11)	R1/U
1,1,1-Trichloroethane	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Trichloroethene	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Benzene	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Bromoform	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Methyl isobutyl ketone	ug/kg	ND (13)	R1/U	ND (16)	R1/U	ND (10)	R1/U	ND (11)	R1/U
2-Hexanone	ug/kg	ND (13)	R1/U	ND (16)	R1/U	ND (10)	R1/U	ND (11)	R1/U
Toluene	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Chlorobenzene	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
Xylenes	ug/kg	ND (7)	R1/U	ND (8)	R1/U	ND (5.1)	R1/U	ND (5.3)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND (430)	R1/U	ND (540)	R1J3/U	ND (360)	R1/U	ND (750)	R1/U
n-Nitrosodipropylamine	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Benzoic acid	ug/kg	ND (2100)	R1/U	ND (2600)	R1/U	ND (1800)	R1/U	ND (3600)	R1/U
Naphthalene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
2-Methylnaphthalene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Dimethyl phthalate	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Acenaphthene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Dibenzofuran	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Diethyl phthalate	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Fluorene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
n-Nitrosodiphenylamine	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Phenanthrene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Anthracene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Fluoranthene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Pyrene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Benzo(a)anthracene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Chrysene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Di-n-octylphthalate	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Benzo(b)fluoranthene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Benzo(k)fluoranthene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B006	Sample Depth(feet):	20.25	IR07B006	30.75	IR07B007	1.75	IR07B007	3.75
Sample Number:	9049P111			9049P112		9049H566		9049H567	
Matrix:	SOIL			SOIL		SOIL		SOIL	
Sample Date:	12/07/90			12/07/90		12/06/90		12/06/90	
Lab Sample Number:	9012070-07A			9012070-08A		9012059-09A		9012059-10A	

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Dibenzo(a,h)anthracene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
Benzo(ghi)perylene	ug/kg	ND (430)	R1/U	ND (540)	R1/U	ND (360)	R1/U	ND (750)	R1/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND (31)	R2J5/U	ND (33)	R2J5/U
Dieldrin	ug/kg	NA		NA		ND (63)	R2J5/U	ND (65)	R2J5/U
4,4'-DDE	ug/kg	NA		NA		ND (63)	R2J5/U	ND (65)	R2J5/U
Endrin	ug/kg	NA		NA		ND (63)	R2J5/U	ND (65)	R2J5/U
4,4'-DDD	ug/kg	NA		NA		ND (63)	R2J5/U	ND (65)	R2J5/U
4,4'-DDT	ug/kg	NA		NA		ND (63)	R2J5/U	ND (65)	R2J5/U
Methoxychlor	ug/kg	NA		NA		ND (310)	R2J5/U	ND (330)	R2J5/U
Aroclor-1260	ug/kg	NA		NA		ND (630)	R2J5/U	ND (650)	R2J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND (23)	J5/U	ND (22)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND (0.58)	J53/U	ND (0.56)	J53/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		ND (900)	U1J5	ND (540)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B007	IR07B007	IR07B007	IR07B007
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9049H568	9049H569	9049H570	9049H571
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012059-11A	9012059-12A	9012059-13A	9012059-14A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Chloroform	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(16) U1J5	ND(10) R1/U	ND(17) U1J5	ND(18) U1J5
1,1,1-Trichloroethane	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Trichloroethene	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Benzene	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Bromoform	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(10) R1/U	ND(10) R1/U	ND(11) R1/U	ND(12) R1/U
2-Hexanone	ug/kg	ND(10) R1/U	ND(10) R1/U	ND(11) R1/U	ND(12) R1/U
Toluene	ug/kg	5 J5F	4 J5F/J	3 J5F/J	ND(6) R1/U
Chlorobenzene	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
Xylenes	ug/kg	ND(5) R1/U	ND(5) R1/U	ND(5) R1/U	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
n-Nitrosodipropylamine	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Benzoic acid	ug/kg	ND(1800) R1/U	ND(1800) R1/U	ND(1700) R1/U	ND(1900) R1/U
Naphthalene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
2-Methylnaphthalene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Dimethyl phthalate	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Acenaphthene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Dibenzofuran	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Diethyl phthalate	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Fluorene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Phenanthrene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Anthracene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Fluoranthene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Pyrene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Benzo(a)anthracene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Chrysene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Di-n-octylphthalate	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Benzo(b)fluoranthene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U
Benzo(k)fluoranthene	ug/kg	ND(360) R1/U	ND(360) R1/U	ND(350) R1/U	ND(400) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B007	IR07B007	IR07B007	IR07B007
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9049H568	9049H569	9049H570	9049H571
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012059-11A	9012059-12A	9012059-13A	9012059-14A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND (360) R1/U	ND (360) R1/U	ND (350) R1/U	ND (400) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND (360) R1/U	ND (360) R1/U	ND (350) R1/U	ND (400) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND (360) R1/U	ND (360) R1/U	ND (350) R1/U	ND (400) R1/U
Benzo(ghi)perylene	ug/kg	ND (360) R1/U	ND (360) R1/U	ND (350) R1/U	ND (400) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND (32) R2J5/U	ND (32) R2J5/U	NA	NA
Dieldrin	ug/kg	ND (63) R2J5/U	ND (64) R2J5/U	NA	NA
4,4'-DDE	ug/kg	ND (63) R2J5/U	ND (64) R2J5/U	NA	NA
Endrin	ug/kg	ND (63) R2J5/U	ND (64) R2J5/U	NA	NA
4,4'-DDD	ug/kg	ND (63) R2J5/U	ND (64) R2J5/U	NA	NA
4,4'-DDT	ug/kg	ND (63) R2J5/U	ND (64) R2J5/U	NA	NA
Methoxychlor	ug/kg	ND (320) R2J5/U	ND (320) R2J5/U	NA	NA
Aroclor-1260	ug/kg	ND (630) R2J5/U	ND (640) R2J5/U	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND (22) J5/U	ND (20) J5/U	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND (0.55) J53/U	ND (0.56) J53/U	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND (1290) U1J5	ND (1280) U1J5	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B008	IR07B008	IR07B008	IR07B008
Sample Depth(feet):	2.25	3.75	6.25	11.25
Sample Number:	9133M134	9133M135	9133M136	9133M137
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598840019SA	0598840020SA	0598870001SA	0598870002SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) A	ND(11) A	ND(12) A	ND(12) A
1,1,1-Trichloroethane	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(11) A	ND(12) A	ND(12) A
2-Hexanone	ug/kg	ND(11) A	ND(11) A	ND(12) A	ND(12) A
Toluene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Chlorobenzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
n-Nitrosodipropylamine	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Benzoic acid	ug/kg	ND(1800) A	ND(1800) A	ND(1900) A	ND(1900) A
Naphthalene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
2-Methylnaphthalene	ug/kg	ND(370) A	64 A/J	ND(130) U1/J	ND(390) A
Dimethyl phthalate	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Acenaphthene	ug/kg	ND(370) A	ND(370) A	40 A/J	ND(390) A
Dibenzofuran	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Diethyl phthalate	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Fluorene	ug/kg	ND(370) A	ND(370) A	59 A/J	ND(390) A
n-Nitrosodiphenylamine	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Phenanthrene	ug/kg	ND(370) A	200 A/J	410 A	ND(390) A
Anthracene	ug/kg	ND(370) A	ND(370) A	42 A/J	ND(390) A
Fluoranthene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Pyrene	ug/kg	ND(370) A	81 A/J	160 A/J	ND(390) A
Benzo(a)anthracene	ug/kg	ND(370) A	ND(370) A	78 A/J	ND(390) A
Chrysene	ug/kg	ND(370) A	79 A/J	190 A/J	ND(390) A
Di-n-octylphthalate	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Benzo(b)fluoranthene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Benzo(k)fluoranthene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B008	IR07B008	IR07B008	IR07B008
Sample Depth(feet):	2.25	3.75	6.25	11.25
Sample Number:	9133M134	9133M135	9133M136	9133M137
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598840019SA	0598840020SA	0598870001SA	0598870002SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(370) A	ND(370) A	41 A/J	ND(390) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Dibenzo(a,h)anthracene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
Benzo(ghi)perylene	ug/kg	ND(370) A	ND(370) A	ND(390) A	ND(390) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(9) J5	2.6 J5/J	ND(9.4) J5	ND(9.5) J5
Dieldrin	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	ND(19) J5
4,4'-DDE	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	ND(19) J5
Endrin	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	ND(19) J5
4,4'-DDD	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	ND(19) J5
4,4'-DDT	ug/kg	ND(18) J5	ND(18) J5	9.1 J5/J	ND(19) J5
Methoxychlor	ug/kg	ND(90) J5	ND(90) J5	ND(94) J5	ND(95) J5
Aroclor-1260	ug/kg	ND(180) J5	ND(180) J5	ND(940) J5/D	ND(190) J5
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11) A	ND(11) A	120 J5	ND(12) A
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11) A	ND(11) A	ND(12) J5	ND(12) A
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	ND(1.1) A	ND(1.2) A	ND(1.2) A
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(56) J5	ND(56) J5	ND(59) J5	ND(60) J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B008	IR07B009	IR07B009	IR07B009
Sample Depth(feet):	16.25	1.75	3.75	5.25
Sample Number:	9133M138	9049H551	9049H552	9049H553
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	12/04/90	12/04/90	12/04/90
Lab Sample Number:	0598870003SA	9012040-08A	9012040-09A	9012041-01A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
1,1-Dichloroethene	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Chloroform	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Methyl ethyl ketone	ug/kg	ND(15)	A	ND(11)	R1/U	ND(11)	R1/U	ND(12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Trichloroethene	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Benzene	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Bromoform	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Methyl isobutyl ketone	ug/kg	ND(15)	A	ND(11)	R1/U	ND(11)	R1/U	ND(12)	R1/U
2-Hexanone	ug/kg	ND(15)	A	ND(11)	R1/U	ND(11)	R1/U	ND(12)	R1/U
Toluene	ug/kg	ND(7)	A	ND(7)	U1J5	ND(15)	U1J5	ND(4)	U1J5/J
Chlorobenzene	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Xylenes	ug/kg	ND(7)	A	ND(6)	R1/U	ND(6)	R1/U	ND(6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
n-Nitrosodipropylamine	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Benzoic acid	ug/kg	ND(2400)	A	ND(2000)	J5/U	ND(2000)	J5/U	ND(2100)	J5/U
Naphthalene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
2-Methylnaphthalene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Dimethyl phthalate	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Acenaphthene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Dibenzofuran	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Diethyl phthalate	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Fluorene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
n-Nitrosodiphenylamine	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Phenanthrene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	320	J5/J
Anthracene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Fluoranthene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Pyrene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	200	J5/J
Benzo(a)anthracene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Chrysene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	200	J5/J
Di-n-octylphthalate	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Benzo(b)fluoranthene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Benzo(k)fluoranthene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B008	IR07B009	IR07B009	IR07B009
Sample Depth(feet):	16.25	1.75	3.75	5.25
Sample Number:	9133M138	9049H551	9049H552	9049H553
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	12/04/90	12/04/90	12/04/90
Lab Sample Number:	0598870003SA	9012040-08A	9012040-09A	9012041-01A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
Benzo(ghi)perylene	ug/kg	ND(490)	A	ND(410)	J5/U	ND(410)	J5/U	ND(430)	J5/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(35)	R12/U	ND(36)	J5/U	ND(38)	J5/U
Dieldrin	ug/kg	NA		ND(71)	R12/U	ND(71)	J5/U	ND(75)	J5/U
4, 4'-DDE	ug/kg	NA		ND(71)	R12/U	ND(71)	J5/U	ND(75)	J5/U
Endrin	ug/kg	NA		ND(71)	R12/U	ND(71)	J5/U	ND(75)	J5/U
4, 4'-DDD	ug/kg	NA		ND(71)	R12/U	ND(71)	J5/U	ND(75)	J5/U
4, 4'-DDT	ug/kg	NA		ND(71)	R12/U	ND(71)	J5/U	ND(75)	J5/U
Methoxychlor	ug/kg	NA		ND(350)	R12/U	ND(360)	J5/U	ND(380)	J5/U
Aroclor-1260	ug/kg	NA		ND(710)	R12/U	ND(710)	J5/U	ND(750)	J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		ND(22)	J5/U	208	J5	154	J5
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		ND(0.56)	J5/U	ND(0.56)	J5/U	ND(0.55)	R1/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		1240	J5	ND(560)	J5/U	ND(560)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B010	IR07B010	IR07B010	IR07B010
Sample Depth(feet):	1.38	7.62	10.88	15.88
Sample Number:	9049H545	9049H546	9049H547	9049H548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012040-02A	9012040-03A	9012040-04A	9012040-05A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
1,1-Dichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Chloroform	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Methyl ethyl ketone	ug/kg	ND(12)	R1/U	ND(12)	R1J3/U	ND(11)	R1J3/U	ND(12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Trichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Benzene	ug/kg	ND(4)	U1J5/B	ND(3)	U1J35/B	ND(3)	U1J35/B	ND(6)	R1/U
Bromoform	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Methyl isobutyl ketone	ug/kg	ND(12)	R1/U	ND(12)	R1J3/U	ND(11)	R1J3/U	ND(12)	R1/U
2-Hexanone	ug/kg	ND(12)	R1/U	ND(12)	R1J3/U	ND(11)	R1J3/U	ND(12)	R1/U
Toluene	ug/kg	ND(7)	U1J5/B	ND(23)	U1J35/B	ND(8)	U1J35/B	ND(7)	U1J5/B
Chlorobenzene	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Xylenes	ug/kg	ND(6)	R1/U	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
n-Nitrosodipropylamine	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Benzoic acid	ug/kg	ND(2000)	J5/U	ND(1900)	J5/U	ND(19000)	J5/U	ND(1800)	J5/U
Naphthalene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
2-Methylnaphthalene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Dimethyl phthalate	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Acenaphthene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Dibenzofuran	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Diethyl phthalate	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Fluorene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
n-Nitrosodiphenylamine	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Phenanthrene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Anthracene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Fluoranthene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Pyrene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Benzo(a)anthracene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Chrysene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Di-n-octylphthalate	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Benzo(b)fluoranthene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Benzo(k)fluoranthene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B010	IR07B010	IR07B010	IR07B010
Sample Depth(feet):	1.38	7.62	10.88	15.88
Sample Number:	9049H545	9049H546	9049H547	9049H548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012040-02A	9012040-03A	9012040-04A	9012040-05A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
Benzo(ghi)perylene	ug/kg	ND(420)	J5/U	ND(400)	J5/U	ND(4000)	J5/U	ND(380)	J5/U
CLP-PEST/PCB									
Aldrin	ug/kg	ND(37)	R12/U	ND(37)	J5/U	ND(35)	J5/U	NA	
Dieldrin	ug/kg	ND(73)	R12/U	ND(74)	J5/U	ND(69)	J5/U	NA	
4, 4'-DDE	ug/kg	ND(73)	R12/U	ND(74)	J5/U	ND(69)	J5/U	NA	
Endrin	ug/kg	ND(73)	R12/U	ND(74)	J5/U	ND(69)	J5/U	NA	
4, 4'-DDD	ug/kg	ND(73)	R12/U	ND(74)	J5/U	ND(69)	J5/U	NA	
4, 4'-DDT	ug/kg	ND(73)	R12/U	ND(74)	J5/U	ND(69)	J5/U	NA	
Methoxychlor	ug/kg	ND(370)	R12/U	ND(370)	J5/U	ND(350)	J5/U	NA	
Aroclor-1260	ug/kg	ND(730)	R12/U	ND(740)	J5/U	ND(690)	J5/U	NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(23)	J5/U	ND(23)	J5/U	ND(22)	J5/U	NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(0.55)	J5/U	ND(0.58)	J5/U	ND(0.56)	J5/U	NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	ND(560)	J5/U	970	J5	ND(540)	J5/U	NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B010	Sample Depth(feet):	20.88	IR07B010	30.62	IR07B011	1.75	IR07B011	3.75
Sample Number:	9049H549			9049H550		9132H796		9132H797	
Matrix:	SOIL			SOIL		SOIL		SOIL	
Sample Date:	12/04/90			12/04/90		08/07/91		08/07/91	
Lab Sample Number:	9012040-06A			9012040-07A		0597500003SA		0597500004SA	

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
1,1-Dichloroethene	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Chloroform	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Methyl ethyl ketone	ug/kg	ND (13)	R1/U	ND (13)	R1/U	ND (11)	A	ND (11)	A
1,1,1-Trichloroethane	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Trichloroethene	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Benzene	ug/kg	ND (6)	R1/U	ND (4)	U1J5/J	ND (5)	A	ND (6)	A
Bromoform	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Methyl isobutyl ketone	ug/kg	ND (13)	R1/U	ND (13)	R1/U	ND (11)	A	ND (11)	A
2-Hexanone	ug/kg	ND (13)	R1/U	ND (13)	R1/U	ND (11)	A	ND (11)	A
Toluene	ug/kg	ND (5)	U1J5/J	ND (11)	U1J5	ND (5)	A	ND (6)	A
Chlorobenzene	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
Xylenes	ug/kg	ND (6)	R1/U	ND (6)	R1/U	ND (5)	A	ND (6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
n-Nitrosodipropylamine	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Benzoic acid	ug/kg	ND (1900)	J5/U	ND (2000)	J5/U	ND (1700)	A	ND (3500)	A
Naphthalene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	42	A/J	ND (730)	A
2-Methylnaphthalene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	64	A/J	ND (730)	A
Dimethyl phthalate	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Acenaphthene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Dibenzofuran	ug/kg	ND (400)	J5/U	ND (420)	J5/U	47	A/J	ND (730)	A
Diethyl phthalate	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (150)	U1/JB
Fluorene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
n-Nitrosodiphenylamine	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Phenanthrene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	160	A/J	170	A/J
Anthracene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Fluoranthene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	130	A/J	270	A/J
Pyrene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	140	A/J	210	A/J
Benzo(a)anthracene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	68	A/J	120	A/J
Chrysene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	110	A/J	160	A/J
Di-n-octylphthalate	ug/kg	ND (400)	J5/U	ND (420)	J5/U	ND (360)	A	ND (730)	A
Benzo(b)fluoranthene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	97	A/J	140	A/J
Benzo(k)fluoranthene	ug/kg	ND (400)	J5/U	ND (420)	J5/U	46	A/J	87	A/J

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B010	IR07B010	IR07B011	IR07B011
Sample Depth(feet):	20.88	30.62	1.75	3.75
Sample Number:	9049H549	9049H550	9132H796	9132H797
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	08/07/91	08/07/91
Lab Sample Number:	9012040-06A	9012040-07A	0597500003SA	0597500004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(400)	J5/U	ND(420)	J5/U	68	A/J	99	A/J
Indeno(1,2,3-cd)pyrene	ug/kg	ND(400)	J5/U	ND(420)	J5/U	44	A/J	ND(730)	A
Dibenzo(a,h)anthracene	ug/kg	ND(400)	J5/U	ND(420)	J5/U	ND(360)	A	ND(730)	A
Benzo(ghi)perylene	ug/kg	ND(400)	J5/U	ND(420)	J5/U	53	A/J	ND(730)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND(43)	J5	ND(8.9)	J5
Dieldrin	ug/kg	NA		NA		ND(87)	J5	ND(18)	J5
4,4'-DDE	ug/kg	NA		NA		ND(87)	J5	ND(18)	J5
Endrin	ug/kg	NA		NA		ND(87)	J5	ND(18)	J5
4,4'-DDD	ug/kg	NA		NA		ND(87)	J5	ND(18)	J5
4,4'-DDT	ug/kg	NA		NA		ND(87)	J5	20	J5
Methoxychlor	ug/kg	NA		NA		ND(430)	J5	ND(89)	J5
Aroclor-1260	ug/kg	NA		NA		340	J5/J	180	J5
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND(33)	A	ND(11)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		49	A/1	ND(11)	A
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND(1.1)	A	ND(1.1)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		ND(54)	A	330	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07B011	IR07B011	IR07B011	IR07B011
Sample Depth(feet):	6.25	11.25	16.75	21.25
Sample Number:	9132H798	9132H799	9132H800	9132H801
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597500005SA	0597500006SA	0597500007SA	0597500008SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
1,1-Dichloroethene	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Chloroform	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Methyl ethyl ketone	ug/kg	ND(11)	J3	ND(14)	A	ND(13)	A	ND(14)	A
1,1,1-Trichloroethane	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Trichloroethene	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Benzene	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Bromoform	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Methyl isobutyl ketone	ug/kg	ND(11)	J3	ND(14)	A	ND(13)	A	ND(14)	A
2-Hexanone	ug/kg	ND(11)	J3	ND(14)	A	ND(13)	A	ND(14)	A
Toluene	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Chlorobenzene	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
Xylenes	ug/kg	ND(6)	J3	ND(7)	A	ND(7)	A	ND(7)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
n-Nitrosodipropylamine	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Benzoic acid	ug/kg	ND(3500)	A	ND(2200)	A	ND(4200)	A	ND(2200)	A
Naphthalene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
2-Methylnaphthalene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Dimethyl phthalate	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Acenaphthene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Dibenzofuran	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Diethyl phthalate	ug/kg	ND(170)	U1/J	ND(450)	A	ND(160)	U1/J	ND(450)	A
Fluorene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
n-Nitrosodiphenylamine	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Phenanthrene	ug/kg	130	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Anthracene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Fluoranthene	ug/kg	160	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Pyrene	ug/kg	160	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Benzo(a)anthracene	ug/kg	86	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Chrysene	ug/kg	130	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Di-n-octylphthalate	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Benzo(b)fluoranthene	ug/kg	120	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Benzo(k)fluoranthene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B011	IR07B011	IR07B011	IR07B011
Sample Depth(feet):	6.25	11.25	16.75	21.25
Sample Number:	9132H798	9132H799	9132H800	9132H801
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597500005SA	0597500006SA	0597500007SA	0597500008SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	93	A/J	ND(450)	A	ND(870)	A	ND(450)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Dibenzo(a,h)anthracene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
Benzo(ghi)perylene	ug/kg	ND(730)	A	ND(450)	A	ND(870)	A	ND(450)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(8.9)	J5	ND(11)	J5	NA		NA	
Dieldrin	ug/kg	ND(18)	J5	ND(22)	J5	NA		NA	
4,4'-DDE	ug/kg	ND(18)	J5	ND(22)	J5	NA		NA	
Endrin	ug/kg	ND(18)	J5	ND(22)	J5	NA		NA	
4,4'-DDD	ug/kg	ND(18)	J5	ND(22)	J5	NA		NA	
4,4'-DDT	ug/kg	8.4	J5/J	ND(22)	J5	NA		NA	
Methoxychlor	ug/kg	ND(89)	J5	ND(110)	J5	NA		NA	
Aroclor-1260	ug/kg	ND(180)	J5	ND(220)	J5	NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(11)	A	ND(14)	A	NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11)	A	ND(14)	A	NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	ND(1.4)	A	NA		NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	400	A	ND(68)	A	NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B012	IR07B012	IR07B012	IR07B012
Sample Depth(feet):	2.25	4.25	6.25	11.25
Sample Number:	9049H538	9049H539	9049H540	9049H541
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/03/90	12/03/90
Lab Sample Number:	69965	69966	69967	9012027-01A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Chloroform	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(11) A	ND(13) A	ND(11) A	ND(12) R1/U
1,1,1-Trichloroethane	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Trichloroethene	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Benzene	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Bromoform	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(13) A	ND(11) A	ND(12) R1/U
2-Hexanone	ug/kg	ND(11) A	ND(13) A	ND(11) A	ND(12) R1/U
Toluene	ug/kg	ND(5.5) A	ND(6.4) A	16 AF	ND(8) U1J5
Chlorobenzene	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
Xylenes	ug/kg	ND(5.5) A	ND(6.4) A	ND(5.7) A	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
n-Nitrosodipropylamine	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Benzoic acid	ug/kg	ND(1700) J5	ND(2000) A	ND(1800) A	ND(2400) J5/U
Naphthalene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
2-Methylnaphthalene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Dimethyl phthalate	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Acenaphthene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Dibenzofuran	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Diethyl phthalate	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Fluorene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
n-Nitrosodiphenylamine	ug/kg	ND(360) J5	ND(420) A	ND(380) A	220 J5/J
Phenanthrene	ug/kg	210 J5/J	ND(420) A	ND(380) A	ND(500) J5/U
Anthracene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Fluoranthene	ug/kg	300 J5/J	ND(420) A	ND(380) A	ND(500) J5/U
Pyrene	ug/kg	190 J5/J	ND(420) A	ND(380) A	ND(500) J5/U
Benzo(a)anthracene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Chrysene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Di-n-octylphthalate	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Benzo(b)fluoranthene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Benzo(k)fluoranthene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
**Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

Station Number:	IR07B012	IR07B012	IR07B012	IR07B012
Sample Depth(feet):	2.25	4.25	6.25	11.25
Sample Number:	9049H538	9049H539	9049H540	9049H541
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/03/90	12/03/90
Lab Sample Number:	69965	69966	69967	9012027-01A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
Benzo(ghi)perylene	ug/kg	ND(360) J5	ND(420) A	ND(380) A	ND(500) J5/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(8.7) J5	ND(10) A	ND(9.2) A	ND(38) R12/U
Dieldrin	ug/kg	ND(17) J5	ND(20) A	ND(18) A	ND(77) R12/U
4,4'-DDE	ug/kg	ND(17) J5	ND(20) A	ND(18) A	ND(77) R12/U
Endrin	ug/kg	ND(17) J5	ND(20) A	ND(18) A	ND(77) R12/U
4,4'-DDD	ug/kg	ND(17) J5	ND(20) A	ND(18) A	ND(77) R12/U
4,4'-DDT	ug/kg	ND(17) J5	ND(20) A	ND(18) A	ND(77) R12/U
Methoxychlor	ug/kg	ND(87) J5	ND(100) A	ND(92) A	ND(380) R12/U
Aroclor-1260	ug/kg	ND(170) J5	ND(200) A	ND(180) A	ND(770) R12/U
TPH DIESEL					
TPH-Diesel	mg/kg	150 A	2200 A	ND(11) A	ND(23) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	7.1 A	ND(1.1) A	ND(0.59) J5/U
OIL & GREASE					
Total Oil & Grease	mg/kg	233 A	8060 A	70.6 A	ND(570) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B012	IR07B012	IR07B012	IR07B013
Sample Depth(feet):	16.25	23.25	30.88	1.75
Sample Number:	9049H542	9049H543	9049H544	9133M139
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/04/90	08/13/91
Lab Sample Number:	9012027-02A	9012027-03A	9012040-01A	0598870004SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) R1/U	1 J5/J	ND(6) R1/U	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Chloroform	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Methyl ethyl ketone	ug/kg	ND(80) U1J5/B	ND(44) U1J5/B	ND(11) R1/U	10 A/J
1,1,1-Trichloroethane	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Trichloroethene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Benzene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Bromoform	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(12) R1/U	ND(12) R1/U	ND(11) R1/U	ND(11) A
2-Hexanone	ug/kg	ND(12) R1/U	ND(12) R1/U	ND(11) R1/U	ND(11) A
Toluene	ug/kg	ND(6) R1/U	ND(2) U1J5/J	ND(6) R1/U	ND(6) A
Chlorobenzene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	2 A/J
Xylenes	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
n-Nitrosodipropylamine	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Benzoic acid	ug/kg	ND(2100) J5/U	ND(2100) J5/U	ND(1700) J5/U	ND(3700) A
Naphthalene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
2-Methylnaphthalene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Dimethyl phthalate	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Acenaphthene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Dibenzofuran	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Diethyl phthalate	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Fluorene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
n-Nitrosodiphenylamine	ug/kg	200 J5/J	ND(430) J5/U	ND(360) J5/U	ND(760) A
Phenanthrene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Anthracene	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Fluoranthene	ug/kg	ND(430) J5/U	310 J5/J	ND(360) J5/U	ND(760) A
Pyrene	ug/kg	ND(430) J5/U	300 J5/J	ND(360) J5/U	ND(760) A
Benzo(a)anthracene	ug/kg	ND(430) J5/U	300 J5/J	ND(360) J5/U	ND(760) A
Chrysene	ug/kg	ND(430) J5/U	310 J5/J	ND(360) J5/U	ND(760) A
Di-n-octylphthalate	ug/kg	ND(430) J5/U	ND(430) J5/U	ND(360) J5/U	ND(760) A
Benzo(b)fluoranthene	ug/kg	ND(430) J5/U	200 J5/J	ND(360) J5/U	ND(760) A
Benzo(k)fluoranthene	ug/kg	ND(430) J5/U	200 J5/J	ND(360) J5/U	ND(760) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B012	IR07B012	IR07B012	IR07B013
Sample Depth(feet):	16.25	23.25	30.88	1.75
Sample Number:	9049H542	9049H543	9049H544	9133M139
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/04/90	08/13/91
Lab Sample Number:	9012027-02A	9012027-03A	9012040-01A	0598870004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(430)	J5/U	250	J5/J	ND(360)	J5/U	ND(760)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(430)	J5/U	ND(430)	J5/U	ND(360)	J5/U	ND(760)	A
Dibenzo(a,h)anthracene	ug/kg	ND(430)	J5/U	ND(430)	J5/U	ND(360)	J5/U	ND(760)	A
Benzo(ghi)perylene	ug/kg	ND(430)	J5/U	ND(430)	J5/U	ND(360)	J5/U	ND(760)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		NA		ND(9.2)	J5
Dieldrin	ug/kg	NA		NA		NA		ND(18)	J5
4,4'-DDE	ug/kg	NA		NA		NA		3.6	J5/J
Endrin	ug/kg	NA		NA		NA		ND(18)	J5
4,4'-DDD	ug/kg	NA		NA		NA		8.1	J5/J
4,4'-DDT	ug/kg	NA		NA		NA		5.4	J5/J
Methoxychlor	ug/kg	NA		NA		NA		ND(92)	J5
Aroclor-1260	ug/kg	NA		NA		NA		ND(180)	J5
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		NA		170	J5/1
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		ND(11)	J5
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		NA		ND(1.1)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		NA		110	J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B013	IR07B013	IR07B013	IR07B013
Sample Depth(feet):	3.75	6.25	11.25	21.25
Sample Number:	9133M140	9133M141	9133M142	9133M143
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870005SA	0598870006SA	0598870007SA	0598870008SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	3 A/J	ND (6) A	ND (6) A	9 A
1,1-Dichloroethene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (7) A
Chloroform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (7) A
Methyl ethyl ketone	ug/kg	11 A	ND (12) A	ND (12) A	ND (13) A
1,1,1-Trichloroethane	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (7) A
Trichloroethene	ug/kg	ND (6) A	2 A/J	ND (6) A	ND (7) A
Benzene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (7) A
Bromoform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (7) A
Methyl isobutyl ketone	ug/kg	ND (11) A	ND (12) A	ND (12) A	ND (13) A
2-Hexanone	ug/kg	ND (11) A	ND (12) A	ND (12) A	ND (13) A
Toluene	ug/kg	1 A/J	1 A/J	ND (6) A	ND (7) A
Chlorobenzene	ug/kg	ND (6) A	1 A/J	ND (6) A	ND (7) A
Xylenes	ug/kg	2 A/J	ND (6) A	ND (6) A	ND (7) A
CLP-SOC					
4-Methylphenol	ug/kg	42 A/J	ND (400) A	ND (420) A	ND (430) A
n-Nitrosodipropylamine	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Benzoic acid	ug/kg	ND (1800) A	ND (2000) A	ND (2000) A	ND (2100) A
Naphthalene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
2-Methylnaphthalene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Dimethyl phthalate	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Acenaphthene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Dibenzofuran	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Diethyl phthalate	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Fluorene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
n-Nitrosodiphenylamine	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Phenanthrene	ug/kg	57 A/J	ND (400) A	ND (420) A	ND (430) A
Anthracene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Fluoranthene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Pyrene	ug/kg	40 A/J	ND (400) A	ND (420) A	ND (430) A
Benzo(a)anthracene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Chrysene	ug/kg	49 A/J	ND (400) A	ND (420) A	ND (430) A
Di-n-octylphthalate	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Benzo(b)fluoranthene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A
Benzo(k)fluoranthene	ug/kg	ND (380) A	ND (400) A	ND (420) A	ND (430) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07B013	IR07B013	IR07B013	IR07B013
Sample Depth(feet):	3.75	6.25	11.25	21.25
Sample Number:	9133M140	9133M141	9133M142	9133M143
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870005SA	0598870006SA	0598870007SA	0598870008SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(380) A	ND(400) A	ND(420) A	ND(430) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(380) A	ND(400) A	ND(420) A	ND(430) A
Dibenzo(a,h)anthracene	ug/kg	ND(380) A	ND(400) A	ND(420) A	ND(430) A
Benzo(ghi)perylene	ug/kg	ND(380) A	ND(400) A	ND(420) A	ND(430) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(9.2) J5	ND(9.8) J5	ND(10) J5	NA
Dieldrin	ug/kg	ND(18) J5	ND(20) J5	ND(20) J5	NA
4,4'-DDE	ug/kg	ND(18) J5	ND(20) J5	ND(20) J5	NA
Endrin	ug/kg	ND(18) J5	ND(20) J5	ND(20) J5	NA
4,4'-DDD	ug/kg	ND(18) J5	ND(20) J5	ND(20) J5	NA
4,4'-DDT	ug/kg	ND(18) J5	4.5 J5/J	ND(20) J5	NA
Methoxychlor	ug/kg	ND(92) J5	ND(98) J5	ND(100) J5	NA
Aroclor-1260	ug/kg	ND(180) J5	ND(200) J5	ND(200) J5	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(12) J5	ND(12) A	ND(13) J5	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	14 J5/1	ND(12) A	ND(13) J5	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.2) A	ND(1.2) A	ND(1.3) A	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(58) J5	ND(61) J5	ND(63) J5	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B014	IR07B014	IR07B014	IR07B014
Sample Depth(feet):	1.75	4.25	6.25	16.25
Sample Number:	9133H835	9133H836	9133H837	9133H838
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840001SA	0598840002SA	0598840003SA	0598840004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	1	J3/J
1,1-Dichloroethene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Chloroform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Methyl ethyl ketone	ug/kg	ND(11)	A	ND(11)	A	ND(12)	A	ND(12)	J3
1,1,1-Trichloroethane	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Trichloroethene	ug/kg	ND(6)	A	2	A/J	ND(6)	A	ND(6)	J3
Benzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Bromoform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Methyl isobutyl ketone	ug/kg	ND(11)	A	ND(11)	A	ND(12)	A	ND(12)	J3
2-Hexanone	ug/kg	ND(11)	A	ND(11)	A	ND(12)	A	ND(12)	J3
Toluene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Chlorobenzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
Xylenes	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	J3
CLP-SOC									
4-Methylphenol	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
n-Nitrosodipropylamine	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Benzoic acid	ug/kg	ND(1800)	A	ND(1800)	A	ND(1900)	A	ND(1900)	A
Naphthalene	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
2-Methylnaphthalene	ug/kg	90	A/J	90	A/J	ND(400)	A	ND(390)	A
Dimethyl phthalate	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Acenaphthene	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Dibenzofuran	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Diethyl phthalate	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Fluorene	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
n-Nitrosodiphenylamine	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Phenanthrene	ug/kg	110	A/J	190	A/J	ND(400)	A	43	A/J
Anthracene	ug/kg	370	A	36	A/J	ND(400)	A	ND(390)	A
Fluoranthene	ug/kg	110	A/J	280	A/J	ND(400)	A	53	A/J
Pyrene	ug/kg	120	A/J	270	A/J	ND(400)	A	67	A/J
Benzo(a)anthracene	ug/kg	53	A/J	150	A/J	ND(400)	A	ND(390)	A
Chrysene	ug/kg	90	A/J	260	A/J	ND(400)	A	66	A/J
Di-n-octylphthalate	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Benzo(b)fluoranthene	ug/kg	58	A/J	160	A/J	ND(400)	A	ND(390)	A
Benzo(k)fluoranthene	ug/kg	370	A	56	A/J	ND(400)	A	ND(390)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B014	IR07B014	IR07B014	IR07B014
Sample Depth(feet):	1.75	4.25	6.25	16.25
Sample Number:	9133H835	9133H836	9133H837	9133H838
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840001SA	0598840002SA	0598840003SA	0598840004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	41	A/J	100	A/J	ND(400)	A	ND(390)	A
Indeno(1,2,3-cd)pyrene	ug/kg	50	A/J	50	A/J	ND(400)	A	ND(390)	A
Dibenzo(a,h)anthracene	ug/kg	ND(370)	A	ND(370)	A	ND(400)	A	ND(390)	A
Benzo(ghi)perylene	ug/kg	370	A	52	A/J	ND(400)	A	ND(390)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(8.9)	J5	ND(9)	J5	ND(9.6)	J5	NA	
Dieldrin	ug/kg	ND(18)	J5	ND(18)	J5	ND(19)	J5	NA	
4,4'-DDE	ug/kg	2.9	J5/J	ND(18)	J5	ND(19)	J5	NA	
Endrin	ug/kg	ND(18)	J5	ND(18)	J5	ND(19)	J5	NA	
4,4'-DDD	ug/kg	3.6	J5/J	ND(18)	J5	ND(19)	J5	NA	
4,4'-DDT	ug/kg	22	J5	ND(18)	J5	ND(19)	J5	NA	
Methoxychlor	ug/kg	ND(89)	J5	ND(90)	J5	ND(96)	J5	NA	
Aroclor-1260	ug/kg	ND(180)	J5	ND(180)	J5	ND(190)	J5	NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(11)	A	ND(11)	A	ND(12)	A	NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11)	A	ND(11)	A	ND(12)	A	NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	ND(1.1)	A	ND(1.2)	A	NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	ND(56)	J5	71	J5	ND(60)	J5	NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.
ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B014	IR07B014	IR07B015	IR07B015
Sample Depth(feet):	21.75	31.25	1.75	3.75
Sample Number:	9133H839	9133H840	9132H807	9132H808
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/08/91	08/08/91
Lab Sample Number:	0598840005SA	0598840006SA	0597500014SA	0597500015SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	1	J3/J	ND (6)	J3	ND (6)	A	ND (6)	A
1,1-Dichloroethene	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Chloroform	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Methyl ethyl ketone	ug/kg	ND (12)	J3	ND (12)	J3	ND (11)	A	ND (11)	A
1,1,1-Trichloroethane	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Trichloroethene	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Benzene	ug/kg	3	J3/J	ND (6)	J3	ND (6)	A	ND (6)	A
Bromoform	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Methyl isobutyl ketone	ug/kg	ND (12)	J3	ND (12)	J3	ND (11)	A	ND (11)	A
2-Hexanone	ug/kg	ND (12)	J3	ND (12)	J3	ND (11)	A	ND (11)	A
Toluene	ug/kg	2	J3/J	ND (6)	J3	ND (6)	A	ND (6)	A
Chlorobenzene	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
Xylenes	ug/kg	ND (6)	J3	ND (6)	J3	ND (6)	A	ND (6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
n-Nitrosodipropylamine	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Benzoic acid	ug/kg	ND (1900)	A	ND (1900)	A	ND (1800)	A	ND (1800)	A
Naphthalene	ug/kg	ND (390)	A	ND (380)	A	81	A/J	43	A/J
2-Methylnaphthalene	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Dimethyl phthalate	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Acenaphthene	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Dibenzofuran	ug/kg	ND (390)	A	ND (380)	A	68	A/J	ND (370)	A
Diethyl phthalate	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Fluorene	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
n-Nitrosodiphenylamine	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Phenanthrene	ug/kg	ND (390)	A	ND (380)	A	250	A/J	81	A/J
Anthracene	ug/kg	ND (390)	A	ND (380)	A	39	A/J	ND (370)	A
Fluoranthene	ug/kg	ND (390)	A	ND (380)	A	180	A/J	ND (370)	A
Pyrene	ug/kg	ND (390)	A	ND (380)	A	120	A/J	ND (370)	A
Benzo(a)anthracene	ug/kg	ND (390)	A	ND (380)	A	71	A/J	ND (370)	A
Chrysene	ug/kg	ND (390)	A	ND (380)	A	130	A/J	37	A/J
Di-n-octylphthalate	ug/kg	ND (390)	A	ND (380)	A	ND (370)	A	ND (370)	A
Benzo(b)fluoranthene	ug/kg	ND (390)	A	ND (380)	A	94	A/J	ND (370)	A
Benzo(k)fluoranthene	ug/kg	ND (390)	A	ND (380)	A	45	A/J	ND (370)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B014	IR07B014	IR07B015	IR07B015
Sample Depth(feet):	21.75	31.25	1.75	3.75
Sample Number:	9133H839	9133H840	9132H807	9132H808
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/08/91	08/08/91
Lab Sample Number:	0598840005SA	0598840006SA	0597500014SA	0597500015SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(390)	A	ND(380)	A	54	A/J	ND(370)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(390)	A	ND(380)	A	ND(370)	A	ND(370)	A
Dibenzo(a,h)anthracene	ug/kg	ND(390)	A	ND(380)	A	ND(370)	A	ND(370)	A
Benzo(ghi)perylene	ug/kg	ND(390)	A	ND(380)	A	ND(370)	A	ND(370)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND(90)	J5	ND(9)	J5
Dieldrin	ug/kg	NA		NA		ND(180)	J5	ND(18)	J5
4,4'-DDE	ug/kg	NA		NA		ND(180)	J5	ND(18)	J5
Endrin	ug/kg	NA		NA		ND(180)	J5	ND(18)	J5
4,4'-DDD	ug/kg	NA		NA		ND(180)	J5	ND(18)	J5
4,4'-DDT	ug/kg	NA		NA		ND(180)	J5	ND(18)	J5
Methoxychlor	ug/kg	NA		NA		ND(900)	J5	ND(90)	J5
Aroclor-1260	ug/kg	NA		NA		ND(1800)	J5	ND(180)	J5
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND(11)	A	ND(11)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		19	A/1	ND(11)	A
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND(1.1)	A	ND(1.1)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		ND(56)	A	850	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B015	IR07B015	IR07B015	IR07B015
Sample Depth(feet):	6.75	11.25	16.75	21.25
Sample Number:	9132H809	9132H810	9132H811	9132H812
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0597500016SA	0597500017SA	0597500018SA	0597500019SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Chloroform	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) J5	ND(12) J3	ND(11) J3	ND(12) A
1,1,1-Trichloroethane	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Trichloroethene	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Benzene	ug/kg	ND(6) J5	ND(6) J3	2 J3/J	ND(6) A
Bromoform	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) J5	ND(12) J3	ND(11) J3	ND(12) A
2-Hexanone	ug/kg	ND(11) J5	ND(12) J3	ND(11) J3	ND(12) A
Toluene	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Chlorobenzene	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
Xylenes	ug/kg	ND(6) J5	ND(6) J3	ND(6) J3	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
n-Nitrosodipropylamine	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Benzoic acid	ug/kg	ND(1800) A	ND(1900) A	ND(1800) A	ND(1900) A
Naphthalene	ug/kg	40 A/J	67 A/J	ND(380) A	120 A/J
2-Methylnaphthalene	ug/kg	ND(370) A	240 A/J	ND(380) A	820 A
Dimethyl phthalate	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Acenaphthene	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Dibenzofuran	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Diethyl phthalate	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Fluorene	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
n-Nitrosodiphenylamine	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Phenanthrene	ug/kg	160 A/J	49 A/J	ND(380) A	ND(390) A
Anthracene	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Fluoranthene	ug/kg	240 A/J	38 A/J	ND(380) A	ND(390) A
Pyrene	ug/kg	170 A/J	69 A/J	ND(380) A	ND(390) A
Benzo(a)anthracene	ug/kg	140 A/J	ND(390) A	ND(380) A	ND(390) A
Chrysene	ug/kg	220 A/J	ND(390) A	ND(380) A	ND(390) A
Di-n-octylphthalate	ug/kg	ND(370) A	ND(390) A	ND(380) A	ND(390) A
Benzo(b)fluoranthene	ug/kg	150 A/J	46 A/J	ND(380) A	ND(390) A
Benzo(k)fluoranthene	ug/kg	76 A/J	ND(390) A	ND(380) A	ND(390) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B015	IR07B015	IR07B015	IR07B015
Sample Depth(feet):	6.75	11.25	16.75	21.25
Sample Number:	9132H809	9132H810	9132H811	9132H812
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0597500016SA	0597500017SA	0597500018SA	0597500019SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	92	A/J	ND(390)	A	ND(380)	A	ND(390)	A
Indeno(1, 2, 3-cd)pyrene	ug/kg	48	A/J	ND(390)	A	ND(380)	A	ND(390)	A
Dibenzo(a,h)anthracene	ug/kg	ND(370)	A	ND(390)	A	ND(380)	A	ND(390)	A
Benzo(ghi)perylene	ug/kg	50	A/J	ND(390)	A	ND(380)	A	ND(390)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(9)	J5	ND(9.5)	J5	NA		NA	
Dieldrin	ug/kg	ND(18)	J5	ND(19)	J5	NA		NA	
4, 4'-DDE	ug/kg	ND(18)	J5	ND(19)	J5	NA		NA	
Endrin	ug/kg	ND(18)	J5	ND(19)	J5	NA		NA	
4, 4'-DDD	ug/kg	ND(18)	J5	ND(19)	J5	NA		NA	
4, 4'-DDT	ug/kg	ND(18)	J5	ND(19)	J5	NA		NA	
Methoxychlor	ug/kg	ND(90)	J5	ND(95)	J5	NA		NA	
Aroclor-1260	ug/kg	ND(180)	J5	ND(190)	J5	NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(11)	A	ND(12)	A	NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	12	A/1	18	A/1	NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	ND(1.2)	A	NA		NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	1800	A	180	A	NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B015	IR07B016	IR07B016	IR07B016
Sample Depth(feet):	31.75	1.75	3.75	16.25
Sample Number:	9132H813	9132H823	9132H824	9132H825
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	0597500020SA	9108094-09	9108094-10	9108094-11

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
1,1-Dichloroethene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	3.76	A/J
Chloroform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Methyl ethyl ketone	ug/kg	ND(12)	A	ND(12)	A	ND(11)	A	20.97	A
1,1,1-Trichloroethane	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Trichloroethene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Benzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Bromoform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Methyl isobutyl ketone	ug/kg	ND(12)	A	ND(12)	A	ND(11)	A	ND(11)	A
2-Hexanone	ug/kg	ND(12)	A	ND(12)	A	6.12	A/J	13.18	A
Toluene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Chlorobenzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Xylenes	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
n-Nitrosodipropylamine	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Benzoic acid	ug/kg	ND(2000)	A	ND(1961)	A	ND(1916)	A	ND(1812)	A
Naphthalene	ug/kg	160	A/J	ND(392)	A	ND(383)	A	ND(362)	A
2-Methylnaphthalene	ug/kg	1000	A	ND(392)	A	ND(383)	A	ND(362)	A
Dimethyl phthalate	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Acenaphthene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Dibenzofuran	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Diethyl phthalate	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Fluorene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
n-Nitrosodiphenylamine	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Phenanthrene	ug/kg	82	A/J	ND(392)	A	ND(383)	A	ND(362)	A
Anthracene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Fluoranthene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Pyrene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Benzo(a)anthracene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Chrysene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Di-n-octylphthalate	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Benzo(b)fluoranthene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Benzo(k)fluoranthene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B015	IR07B016	IR07B016	IR07B016
Sample Depth(feet):	31.75	1.75	3.75	16.25
Sample Number:	9132H813	9132H823	9132H824	9132H825
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	0597500020SA	9108094-09	9108094-10	9108094-11

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Dibenzo(a,h)anthracene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
Benzo(ghi)perylene	ug/kg	ND(410)	A	ND(392)	A	ND(383)	A	ND(362)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(9)	A	ND(9)	A	NA	
Dieldrin	ug/kg	NA		ND(19)	A	ND(18)	A	NA	
4,4'-DDE	ug/kg	NA		ND(19)	A	ND(18)	A	NA	
Endrin	ug/kg	NA		ND(19)	A	ND(18)	A	NA	
4,4'-DDD	ug/kg	NA		ND(19)	A	ND(18)	A	NA	
4,4'-DDT	ug/kg	NA		ND(19)	A	ND(18)	A	NA	
Methoxychlor	ug/kg	NA		ND(94)	A	ND(92)	A	NA	
Aroclor-1260	ug/kg	NA		ND(188)	A	ND(184)	A	NA	
TPH DIESEL									
TPH-Diesel	mg/kg	NA		ND(11.8)	A	ND(11.5)	A	NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		ND(5)	A	ND(5)	A	NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		180	A	140	A	NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B016	Sample Depth(feet):	21.25	IR07B017	1.75	IR07B017	3.75	IR07B017	6.75
Sample Number:	9132H826			9132H827		9132H828		9132H829	
Matrix:	SOIL			SOIL		SOIL		SOIL	
Sample Date:	08/09/91			08/09/91		08/09/91		08/09/91	
Lab Sample Number:	9108094-12			9108094-13		9108094-14		9108094-15	

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
1,1-Dichloroethene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Chloroform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Methyl ethyl ketone	ug/kg	ND(12)	A	ND(12)	A	ND(11)	A	ND(12)	A
1,1,1-Trichloroethane	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Trichloroethene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Benzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Bromoform	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Methyl isobutyl ketone	ug/kg	ND(12)	A	ND(12)	A	ND(11)	A	ND(12)	A
2-Hexanone	ug/kg	ND(12)	A	ND(12)	A	ND(11)	A	ND(12)	A
Toluene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Chlorobenzene	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
Xylenes	ug/kg	ND(6)	A	ND(6)	A	ND(6)	A	ND(6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
n-Nitrosodipropylamine	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Benzoic acid	ug/kg	ND(2058)	A	ND(19380)	A	ND(19157)	A	ND(2058)	A
Naphthalene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
2-Methylnaphthalene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Dimethyl phthalate	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Acenaphthene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Dibenzofuran	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Diethyl phthalate	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Fluorene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
n-Nitrosodiphenylamine	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Phenanthrene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Anthracene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Fluoranthene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Pyrene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Benzo(a)anthracene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Chrysene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Di-n-octylphthalate	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Benzo(b)fluoranthene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Benzo(k)fluoranthene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B016	IR07B017	IR07B017	IR07B017
Sample Depth(feet):	21.25	1.75	3.75	6.75
Sample Number:	9132H826	9132H827	9132H828	9132H829
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	9108094-12	9108094-13	9108094-14	9108094-15

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Dibenzo(a,h)anthracene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
Benzo(ghi)perylene	ug/kg	ND(412)	A	ND(3876)	A	ND(3831)	A	ND(412)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(9)	A	ND(9)	A	ND(10)	A
Dieldrin	ug/kg	NA		ND(19)	A	ND(18)	A	ND(20)	A
4,4'-DDE	ug/kg	NA		ND(19)	A	ND(18)	A	ND(20)	A
Endrin	ug/kg	NA		ND(19)	A	ND(18)	A	ND(20)	A
4,4'-DDD	ug/kg	NA		ND(19)	A	ND(18)	A	ND(20)	A
4,4'-DDT	ug/kg	NA		ND(19)	A	ND(18)	A	ND(20)	A
Methoxychlor	ug/kg	NA		ND(93)	A	ND(92)	A	ND(99)	A
Aroclor-1260	ug/kg	NA		ND(186)	A	ND(184)	A	ND(198)	A
TPH DIESEL									
TPH-Diesel	mg/kg	NA		ND(11.6)	A	ND(11.5)	A	ND(12.3)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		ND(5)	A	ND(5)	A	ND(5)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		240	A	140	A	33	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B017	IR07B017	IR07B017	IR07B017
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9132H830	9132H831	9132H832	9132H833
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	9108094-16	9108095-01	9108095-02	9108095-03

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND (6)	A						
1,1-Dichloroethene	ug/kg	ND (6)	A						
Chloroform	ug/kg	ND (6)	A						
Methyl ethyl ketone	ug/kg	ND (12)	A	ND (12)	A	ND (12)	A	ND (13)	A
1,1,1-Trichloroethane	ug/kg	ND (6)	A						
Trichloroethene	ug/kg	ND (6)	A						
Benzene	ug/kg	ND (6)	A						
Bromoform	ug/kg	ND (6)	A						
Methyl isobutyl ketone	ug/kg	ND (12)	A	ND (12)	A	ND (12)	A	ND (13)	A
2-Hexanone	ug/kg	ND (12)	A	ND (12)	A	ND (12)	A	ND (13)	A
Toluene	ug/kg	ND (6)	A						
Chlorobenzene	ug/kg	ND (6)	A						
Xylenes	ug/kg	ND (6)	A						
CLP-SOC									
4-Methylphenol	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
n-Nitrosodipropylamine	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Benzoic acid	ug/kg	ND (1938)	A	ND (2033)	A	ND (2033)	A	ND (2083)	A
Naphthalene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
2-Methylnaphthalene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Dimethyl phthalate	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Acenaphthene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Dibenzofuran	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Diethyl phthalate	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Fluorene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
n-Nitrosodiphenylamine	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Phenanthrene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Anthracene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Fluoranthene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Pyrene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Benzo(a)anthracene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Chrysene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Di-n-octylphthalate	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Benzo(b)fluoranthene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A
Benzo(k)fluoranthene	ug/kg	ND (388)	A	ND (407)	A	ND (407)	A	ND (417)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B017	IR07B017	IR07B017	IR07B017
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9132H830	9132H831	9132H832	9132H833
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	9108094-16	9108095-01	9108095-02	9108095-03

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(388) A	ND(407) A	ND(407) A	ND(417) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(388) A	ND(407) A	ND(407) A	ND(417) A
Dibenzo(a,h)anthracene	ug/kg	ND(388) A	ND(407) A	ND(407) A	ND(417) A
Benzo(ghi)perylene	ug/kg	ND(388) A	ND(407) A	ND(407) A	ND(417) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(9) A	NA	NA	NA
Dieldrin	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDE	ug/kg	ND(19) A	NA	NA	NA
Endrin	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDD	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDT	ug/kg	ND(19) A	NA	NA	NA
Methoxychlor	ug/kg	ND(93) A	NA	NA	NA
Aroclor-1260	ug/kg	ND(186) A	NA	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11.6) A	NA	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(5) A	NA	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	43 A	NA	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B017	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	40.75	1.25	2.75	5.25
Sample Number:	9132H834	9049G555	9049G556	9049G557
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9108095-04	9012058-01A	9012058-02A	9012058-03A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	8.62 A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Chloroform	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(13) A	ND(12) R1/U	ND(2) U1J5/BJ	ND(12) R1/U
1,1,1-Trichloroethane	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Trichloroethene	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Benzene	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Bromoform	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(13) A	ND(12) R1/U	ND(11) R1/U	ND(12) R1/U
2-Hexanone	ug/kg	ND(13) A	ND(12) R1/U	ND(11) R1/U	ND(12) R1/U
Toluene	ug/kg	ND(6) A	17 J5F	ND(6) R1/U	ND(6) R1/U
Chlorobenzene	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Xylenes	ug/kg	ND(6) A	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
n-Nitrosodipropylamine	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Benzoic acid	ug/kg	ND(2083) A	ND(2100) R1/U	ND(19000) R1/U	ND(2000) R1/U
Naphthalene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
2-Methylnaphthalene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Dimethyl phthalate	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Acenaphthene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Dibenzofuran	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Diethyl phthalate	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Fluorene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Phenanthrene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Anthracene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Fluoranthene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Pyrene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Benzo(a)anthracene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Chrysene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Di-n-octylphthalate	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Benzo(b)fluoranthene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U
Benzo(k)fluoranthene	ug/kg	ND(417) A	ND(430) R1/U	ND(3900) R1/U	ND(420) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B017	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	40.75	1.25	2.75	5.25
Sample Number:	9132H834	9049G555	9049G556	9049G557
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9108095-04	9012058-01A	9012058-02A	9012058-03A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(417)	A	ND(430)	R1/U	ND(3900)	R1/U	ND(420)	R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(417)	A	ND(430)	R1/U	ND(3900)	R1/U	ND(420)	R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(417)	A	ND(430)	R1/U	ND(3900)	R1/U	ND(420)	R1/U
Benzo(ghi)perylene	ug/kg	ND(417)	A	ND(430)	R1/U	ND(3900)	R1/U	ND(420)	R1/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(36)	J35/U	ND(34)	J5/U	ND(35)	J5/U
Dieldrin	ug/kg	NA		ND(72)	J35/U	ND(67)	J5/U	ND(71)	J5/U
4,4'-DDE	ug/kg	NA		ND(72)	J35/U	ND(67)	J5/U	ND(71)	J5/U
Endrin	ug/kg	NA		ND(72)	J35/U	ND(67)	J5/U	ND(71)	J5/U
4,4'-DDD	ug/kg	NA		ND(72)	J35/U	ND(67)	J5/U	ND(71)	J5/U
4,4'-DDT	ug/kg	NA		ND(72)	J35/U	ND(67)	J5/U	ND(71)	J5/U
Methoxychlor	ug/kg	NA		ND(360)	J35/U	ND(340)	J5/U	ND(350)	J5/U
Aroclor-1260	ug/kg	NA		ND(720)	J35/U	ND(670)	J5/U	ND(710)	J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		ND(22)	J5/U	ND(22)	J5/U	ND(23)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		ND(0.5)	R1/U	ND(0.53)	R1/U	ND(0.55)	R1/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		ND(540)	J5/U	1090	J5	ND(560)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B018	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	10.75	15.75	20.75	30.25
Sample Number:	9049G558	9049G559	9049G560	9049G561
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-04A	9012058-05A	9012058-06A	9012058-07A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Chloroform	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U
1,1,1-Trichloroethane	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Trichloroethene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Benzene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Bromoform	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U
2-Hexanone	ug/kg	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U	ND(12) R1/U
Toluene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	4 J5F/J
Chlorobenzene	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
Xylenes	ug/kg	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
n-Nitrosodipropylamine	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Benzoic acid	ug/kg	ND(2000) R1/U	ND(2000) R1/U	ND(2000) R1/U	ND(2000) R1/U
Naphthalene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
2-Methylnaphthalene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Dimethyl phthalate	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Acenaphthene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Dibenzofuran	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Diethyl phthalate	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Fluorene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(420) R1/U	170 J5/J	ND(410) R1/U	ND(410) R1/U
Phenanthrene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Anthracene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Fluoranthene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Pyrene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Benzo(a)anthracene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Chrysene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Di-n-octylphthalate	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Benzo(b)fluoranthene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U
Benzo(k)fluoranthene	ug/kg	ND(420) R1/U	ND(400) R1/U	ND(410) R1/U	ND(410) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B018	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	10.75	15.75	20.75	30.25
Sample Number:	9049G558	9049G559	9049G560	9049G561
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-04A	9012058-05A	9012058-06A	9012058-07A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(420)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(410)	R1/U
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(420)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(410)	R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(420)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(410)	R1/U
Benzo(ghi)perylene	ug/kg	ND(420)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(410)	R1/U
CLP-PEST/PCB									
Aldrin	ug/kg	ND(37)	J5/U	NA		NA		NA	
Dieldrin	ug/kg	ND(74)	J5/U	NA		NA		NA	
4, 4'-DDE	ug/kg	ND(74)	J5/U	NA		NA		NA	
Endrin	ug/kg	ND(74)	J5/U	NA		NA		NA	
4, 4'-DDD	ug/kg	ND(74)	J5/U	NA		NA		NA	
4, 4'-DDT	ug/kg	ND(74)	J5/U	NA		NA		NA	
Methoxychlor	ug/kg	ND(370)	J5/U	NA		NA		NA	
Aroclor-1260	ug/kg	ND(740)	J5/U	NA		NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(21)	J5/U	NA		NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(0.58)	R1/U	NA		NA		NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	550	J5	NA		NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B018	IR07B018	IR07B022	IR07B022
Sample Depth(feet):	40.25	49.75	1.75	3.75
Sample Number:	9049G562	9049G563	9049H562	9049H563
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-08A	9012058-09A	9012059-05A	9012059-06A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
1,1-Dichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Chloroform	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Methyl ethyl ketone	ug/kg	ND(13)	R1/U	ND(12)	R1/U	ND(22)	U1J5	ND(30)	U1J5
1,1,1-Trichloroethane	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Trichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Benzene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Bromoform	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Methyl isobutyl ketone	ug/kg	ND(13)	R1/U	ND(12)	R1/U	ND(10)	R1/U	ND(10)	R1/U
2-Hexanone	ug/kg	ND(13)	R1/U	ND(12)	R1/U	ND(10)	R1/U	ND(10)	R1/U
Toluene	ug/kg	6	J5F	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Chlorobenzene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
Xylenes	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(5.1)	R1/U	ND(5.2)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
n-Nitrosodipropylamine	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Benzoic acid	ug/kg	ND(2000)	R1/U	ND(1900)	R1/U	ND(1800)	R1/U	ND(2500)	R1/U
Naphthalene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
2-Methylnaphthalene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Dimethyl phthalate	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Acenaphthene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Dibenzofuran	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Diethyl phthalate	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Fluorene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
n-Nitrosodiphenylamine	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Phenanthrene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Anthracene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Fluoranthene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Pyrene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	270	J5/J
Benzo(a)anthracene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	240	J5/J
Chrysene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Di-n-octylphthalate	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Benzo(b)fluoranthene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Benzo(k)fluoranthene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B018	IR07B018	IR07B022	IR07B022
Sample Depth(feet):	40.25	49.75	1.75	3.75
Sample Number:	9049G562	9049G563	9049H562	9049H563
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-08A	9012058-09A	9012059-05A	9012059-06A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
Benzo(ghi)perylene	ug/kg	ND(410)	R1/U	ND(400)	R1/U	ND(370)	R1/U	ND(520)	R1/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND(32)	R2J5/U	ND(33)	R2J5/U
Dieldrin	ug/kg	NA		NA		ND(64)	R2J5/U	ND(67)	R2J5/U
4,4'-DDE	ug/kg	NA		NA		ND(64)	R2J5/U	ND(67)	R2J5/U
Endrin	ug/kg	NA		NA		ND(64)	R2J5/U	ND(67)	R2J5/U
4,4'-DDD	ug/kg	NA		NA		ND(64)	R2J5/U	ND(67)	R2J5/U
4,4'-DDT	ug/kg	NA		NA		ND(64)	R2J5/U	ND(67)	R2J5/U
Methoxychlor	ug/kg	NA		NA		ND(320)	R2J5/U	ND(330)	R2J5/U
Aroclor-1260	ug/kg	NA		NA		ND(640)	R2J5/U	ND(670)	R2J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		204	J5	ND(23)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND(0.57)	J53/U	ND(0.59)	J53/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		ND(2770)	U1J5	ND(1120)	U1J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B022	IR07B022	IR07B024	IR07B024
Sample Depth(feet):	6.75	11.25	2.25	3.75
Sample Number:	9049H564	9049H565	9049H554	9049H555
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012059-07A	9012059-08A	9012059-01A	9012059-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	2 J5/J	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
1,1-Dichloroethene	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Chloroform	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Methyl ethyl ketone	ug/kg	ND(22) U1J5	ND(11) R1/U	ND(33) U1J5/B	ND(10) R1/U
1,1,1-Trichloroethane	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Trichloroethene	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Benzene	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Bromoform	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Methyl isobutyl ketone	ug/kg	ND(10) R1/U	ND(11) R1/U	ND(10) R1/U	ND(10) R1/U
2-Hexanone	ug/kg	ND(10) R1/U	ND(11) R1/U	ND(10) R1/U	ND(10) R1/U
Toluene	ug/kg	6 J5F	7 J5F	ND(5) R1/U	1 J5F/J
Chlorobenzene	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
Xylenes	ug/kg	ND(5.1) R1/U	ND(5.3) R1/U	ND(5) R1/U	ND(5) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
n-Nitrosodipropylamine	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Benzoic acid	ug/kg	ND(45000) R1/U	ND(1800) R1/U	ND(17000) R1/U	ND(1800) R1/U
Naphthalene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
2-Methylnaphthalene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Dimethyl phthalate	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Acenaphthene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Dibenzofuran	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Diethyl phthalate	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Fluorene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Phenanthrene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Anthracene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Fluoranthene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Pyrene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Benzo(a)anthracene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Chrysene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Di-n-octylphthalate	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Benzo(b)fluoranthene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U
Benzo(k)fluoranthene	ug/kg	ND(9300) R1/U	ND(380) R1/U	ND(3600) R1/U	ND(360) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B022	IR07B022	IR07B024	IR07B024
Sample Depth(feet):	6.75	11.25	2.25	3.75
Sample Number:	9049H564	9049H565	9049H554	9049H555
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012059-07A	9012059-08A	9012059-01A	9012059-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND (9300) R1/U	ND (380) R1/U	ND (3600) R1/U	ND (360) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND (9300) R1/U	ND (380) R1/U	ND (3600) R1/U	ND (360) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND (9300) R1/U	ND (380) R1/U	ND (3600) R1/U	ND (360) R1/U
Benzo(ghi)perylene	ug/kg	ND (9300) R1/U	ND (380) R1/U	ND (3600) R1/U	ND (360) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	9 J35/J	ND (33) R2J5/U	ND (32) R2J5/U	ND (32) R2J5/U
Dieldrin	ug/kg	34.6 J35/J	ND (66) R2J5/U	ND (63) R2J5/U	ND (64) R2J5/U
4,4'-DDE	ug/kg	111 J35	ND (66) R2J5/U	ND (63) R2J5/U	ND (64) R2J5/U
Endrin	ug/kg	6.6 J35/J	ND (66) R2J5/U	ND (63) R2J5/U	ND (64) R2J5/U
4,4'-DDD	ug/kg	245 J35	ND (66) R2J5/U	ND (63) R2J5/U	ND (64) R2J5/U
4,4'-DDT	ug/kg	70.6 J35	ND (66) R2J5/U	ND (63) R2J5/U	ND (64) R2J5/U
Methoxychlor	ug/kg	ND (330) R2J5/U	ND (330) R2J5/U	ND (320) R2J5/U	ND (320) R2J5/U
Aroclor-1260	ug/kg	ND (650) R2J5/U	ND (660) R2J5/U	ND (630) R2J5/U	ND (640) R2J5/U
TPH DIESEL					
TPH-Diesel	mg/kg	ND (110) J5/U	ND (20) J5/U	ND (110) J5/U	ND (33) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND (0.57) J53/U	ND (0.56) J53/U	ND (0.57) J53/U	ND (0.56) J53/U
OIL & GREASE					
Total Oil & Grease	mg/kg	ND (2370) U1J5	ND (640) J5/U	ND (540) J5/U	ND (540) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B024	IR07B024	IR07B025	IR07B025
Sample Depth(feet):	6.25	16.25	1.25	3.75
Sample Number:	9049H556	9049H557	9132H789	9132H790
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	08/07/91	08/07/91
Lab Sample Number:	9012059-03A	9012059-04A	0597210016SA	0597210017SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
1,1-Dichloroethene	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Chloroform	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Methyl ethyl ketone	ug/kg	ND(27) U1J5	ND(16) R1/U	ND(11) A	ND(10) A
1,1,1-Trichloroethane	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Trichloroethene	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Benzene	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Bromoform	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Methyl isobutyl ketone	ug/kg	ND(10) R1/U	ND(16) R1/U	ND(11) A	ND(10) A
2-Hexanone	ug/kg	ND(10) R1/U	ND(16) R1/U	ND(11) A	ND(10) A
Toluene	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Chlorobenzene	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
Xylenes	ug/kg	ND(5) R1/U	ND(8) R1/U	ND(5) A	ND(5) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
n-Nitrosodipropylamine	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Benzoic acid	ug/kg	ND(1800) R1/U	ND(2500) R1/U	ND(1700) A	ND(1900) A
Naphthalene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
2-Methylnaphthalene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Dimethyl phthalate	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Acenaphthene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Dibenzofuran	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Diethyl phthalate	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Fluorene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
n-Nitrosodiphenylamine	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Phenanthrene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Anthracene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Fluoranthene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Pyrene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Benzo(a)anthracene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Chrysene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Di-n-octylphthalate	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Benzo(b)fluoranthene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Benzo(k)fluoranthene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B024	IR07B024	IR07B025	IR07B025
Sample Depth(feet):	6.25	16.25	1.25	3.75
Sample Number:	9049H556	9049H557	9132H789	9132H790
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	08/07/91	08/07/91
Lab Sample Number:	9012059-03A	9012059-04A	0597210016SA	0597210017SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Dibenzo(a,h)anthracene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
Benzo(ghi)perylene	ug/kg	ND(360) R1/U	ND(510) R1/U	ND(360) A	ND(380) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(32) R2J5/U	NA	ND(8.7) J5	ND(9.3) J5
Dieldrin	ug/kg	ND(64) R2J5/U	NA	ND(17) J5	ND(19) J5
4,4'-DDE	ug/kg	ND(64) R2J5/U	NA	ND(17) J5	ND(19) J5
Endrin	ug/kg	ND(64) R2J5/U	NA	ND(17) J5	ND(19) J5
4,4'-DDD	ug/kg	ND(64) R2J5/U	NA	ND(17) J5	ND(19) J5
4,4'-DDT	ug/kg	ND(64) R2J5/U	NA	ND(17) J5	ND(19) J5
Methoxychlor	ug/kg	ND(320) R2J5/U	NA	ND(87) J5	ND(93) J5
Aroclor-1260	ug/kg	ND(640) R2J5/U	NA	62 J5/J	ND(190) J5
TPH DIESEL					
TPH-Diesel	mg/kg	ND(22) J5/U	NA	ND(11) A	ND(12) A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	ND(11) A	ND(12) A
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.54) J53/U	NA	ND(1.1) A	ND(1.2) A
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(550) J5/U	NA	150 A	ND(58) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B025	IR07B025	IR07B025	IR07B025
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9132H791	9132H792	9132H793	9132H794
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597210018SA	0597210019SA	0597210020SA	0597500001SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Chloroform	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(11) A	ND(16) A	ND(16) A	ND(12) A
1,1,1-Trichloroethane	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Trichloroethene	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Benzene	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Bromoform	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(16) A	ND(16) A	ND(12) A
2-Hexanone	ug/kg	ND(11) A	ND(16) A	ND(16) A	ND(12) A
Toluene	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Chlorobenzene	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
Xylenes	ug/kg	ND(5) A	ND(8) A	ND(8) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
n-Nitrosodipropylamine	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Benzoic acid	ug/kg	ND(3500) J5	ND(1900) A	ND(2500) A	ND(2000) A
Naphthalene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
2-Methylnaphthalene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Dimethyl phthalate	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Acenaphthene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Dibenzofuran	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Diethyl phthalate	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Fluorene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
n-Nitrosodiphenylamine	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Phenanthrene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Anthracene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Fluoranthene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Pyrene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Benzo(a)anthracene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Chrysene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Di-n-octylphthalate	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Benzo(b)fluoranthene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A
Benzo(k)fluoranthene	ug/kg	ND(720) J5	ND(390) A	ND(520) A	ND(410) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B025	IR07B025	IR07B025	IR07B025
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9132H791	9132H792	9132H793	9132H794
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597210018SA	0597210019SA	0597210020SA	0597500001SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(720)	J5	ND(390)	A	ND(520)	A	ND(410)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(720)	J5	ND(390)	A	ND(520)	A	ND(410)	A
Dibenzo(a,h)anthracene	ug/kg	ND(720)	J5	ND(390)	A	ND(520)	A	ND(410)	A
Benzo(ghi)perylene	ug/kg	ND(720)	J5	ND(390)	A	ND(520)	A	ND(410)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(8.7)	J5	ND(9.5)	J5	NA		NA	
Dieldrin	ug/kg	ND(17)	J5	ND(19)	J5	NA		NA	
4,4'-DDE	ug/kg	ND(17)	J5	ND(19)	J5	NA		NA	
Endrin	ug/kg	ND(17)	J5	ND(19)	J5	NA		NA	
4,4'-DDD	ug/kg	ND(17)	J5	ND(19)	J5	NA		NA	
4,4'-DDT	ug/kg	ND(17)	J5	ND(19)	J5	NA		NA	
Methoxychlor	ug/kg	ND(87)	J5	ND(95)	J5	NA		NA	
Aroclor-1260	ug/kg	ND(170)	J5	ND(190)	J5	NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(11)	A	ND(12)	A	NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11)	A	ND(12)	A	NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(1.1)	A	ND(1.2)	A	NA		NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	93	A	NA		NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B025	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	31.25	2.25	4.25	6.25
Sample Number:	9132H795	9133M144	9133M145	9133M146
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0597500002SA	9108095-05	9108095-06	9108095-07

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
1,1-Dichloroethene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Chloroform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Methyl ethyl ketone	ug/kg	ND (12) A	11.09 A/J	35.36 A	ND (11) A
1,1,1-Trichloroethane	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Trichloroethene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Benzene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Bromoform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Methyl isobutyl ketone	ug/kg	ND (12) A	ND (12) A	ND (12) A	7.18 A/J
2-Hexanone	ug/kg	ND (12) A	ND (12) A	ND (12) A	ND (11) A
Toluene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Chlorobenzene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Xylenes	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
n-Nitrosodipropylamine	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Benzoic acid	ug/kg	ND (3900) A	ND (1938) A	ND (1938) A	ND (1873) A
Naphthalene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
2-Methylnaphthalene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Dimethyl phthalate	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Acenaphthene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Dibenzofuran	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Diethyl phthalate	ug/kg	ND (180) U1/J	ND (388) A	ND (388) A	ND (375) A
Fluorene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
n-Nitrosodiphenylamine	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Phenanthrene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Anthracene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Fluoranthene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Pyrene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Benzo(a)anthracene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Chrysene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Di-n-octylphthalate	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Benzo(b)fluoranthene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A
Benzo(k)fluoranthene	ug/kg	ND (810) A	ND (388) A	ND (388) A	ND (375) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B025	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	31.25	2.25	4.25	6.25
Sample Number:	9132H795	9133M144	9133M145	9133M146
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0597500002SA	9108095-05	9108095-06	9108095-07

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(810)	A	ND(388)	A	ND(388)	A	ND(375)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(810)	A	ND(388)	A	ND(388)	A	ND(375)	A
Dibenzo(a,h)anthracene	ug/kg	ND(810)	A	ND(388)	A	ND(388)	A	ND(375)	A
Benzo(ghi)perylene	ug/kg	ND(810)	A	ND(388)	A	ND(388)	A	ND(375)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(9)	A	ND(9)	A	ND(9)	A
Dieldrin	ug/kg	NA		ND(19)	A	ND(19)	A	ND(18)	A
4,4'-DDE	ug/kg	NA		ND(19)	A	ND(19)	A	ND(18)	A
Endrin	ug/kg	NA		ND(19)	A	ND(19)	A	ND(18)	A
4,4'-DDD	ug/kg	NA		59.25	A	ND(19)	A	ND(18)	A
4,4'-DDT	ug/kg	NA		21.09	A	37.04	A	ND(18)	A
Methoxychlor	ug/kg	NA		ND(93)	A	ND(93)	A	ND(90)	A
Aroclor-1260	ug/kg	NA		ND(186)	A	ND(186)	A	ND(180)	A
TPH DIESEL									
TPH-Diesel	mg/kg	NA		60	A	65	A	ND(11.2)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		27	A	23	A	6.6	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		280	A	290	A	98	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B030	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9133M147	9133M148	9133M149	9133M150
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	9108095-08	9108095-09	9108095-10	9108095-11

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
1,1-Dichloroethene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Chloroform	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Methyl ethyl ketone	ug/kg	33.69	A	22.5	A	ND(12)	A	ND(12)	A
1,1,1-Trichloroethane	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Trichloroethene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Benzene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Bromoform	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Methyl isobutyl ketone	ug/kg	ND(12)	A	ND(13)	A	ND(12)	A	ND(12)	A
2-Hexanone	ug/kg	ND(12)	A	ND(13)	A	ND(12)	A	ND(12)	A
Toluene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Chlorobenzene	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
Xylenes	ug/kg	ND(6)	A	ND(7)	A	ND(6)	A	ND(6)	A
CLP-SOC									
4-Methylphenol	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
n-Nitrosodipropylamine	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Benzoic acid	ug/kg	ND(1984)	A	ND(2222)	A	ND(1984)	A	ND(2008)	A
Naphthalene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
2-Methylnaphthalene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Dimethyl phthalate	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Acenaphthene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Dibenzofuran	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Diethyl phthalate	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Fluorene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
n-Nitrosodiphenylamine	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Phenanthrene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Anthracene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Fluoranthene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Pyrene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Benzo(a)anthracene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Chrysene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Di-n-octylphthalate	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Benzo(b)fluoranthene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A
Benzo(k)fluoranthene	ug/kg	ND(397)	A	ND(444)	A	ND(397)	A	ND(402)	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B030	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9133M147	9133M148	9133M149	9133M150
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	9108095-08	9108095-09	9108095-10	9108095-11

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(397) A	ND(444) A	ND(397) A	ND(402) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(397) A	ND(444) A	ND(397) A	ND(402) A
Dibenzo(a,h)anthracene	ug/kg	ND(397) A	ND(444) A	ND(397) A	ND(402) A
Benzo(ghi)perylene	ug/kg	ND(397) A	ND(444) A	ND(397) A	ND(402) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(9) A	NA	NA	NA
Dieldrin	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDE	ug/kg	ND(19) A	NA	NA	NA
Endrin	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDD	ug/kg	ND(19) A	NA	NA	NA
4,4'-DDT	ug/kg	ND(19) A	NA	NA	NA
Methoxychlor	ug/kg	ND(95) A	NA	NA	NA
Aroclor-1260	ug/kg	ND(191) A	NA	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11.9) A	NA	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(5) A	NA	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	60 A	NA	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B030	IR07B032	IR07B032	IR07B032
Sample Depth(feet):	41.25	1.75	3.75	6.25
Sample Number:	9133M151	9133H847	9133H848	9133H849
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	9108095-12	0598840013SA	0598840014SA	0598840015SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
1,1-Dichloroethene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Chloroform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Methyl ethyl ketone	ug/kg	ND (13) A	ND (11) A	3 A/J	ND (12) A
1,1,1-Trichloroethane	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Trichloroethene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Benzene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Bromoform	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Methyl isobutyl ketone	ug/kg	ND (13) A	ND (11) A	ND (11) A	ND (12) A
2-Hexanone	ug/kg	ND (13) A	ND (11) A	ND (11) A	ND (12) A
Toluene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Chlorobenzene	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
Xylenes	ug/kg	ND (6) A	ND (6) A	ND (6) A	ND (6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
n-Nitrosodipropylamine	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Benzoic acid	ug/kg	294.83 A/J	ND (1800) A	ND (3600) A	ND (1900) A
Naphthalene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
2-Methylnaphthalene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Dimethyl phthalate	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Acenaphthene	ug/kg	ND (417) A	ND (380) A	73 A/J	ND (380) A
Dibenzofuran	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Diethyl phthalate	ug/kg	ND (417) A	ND (380) A	320 A/J	ND (380) A
Fluorene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
n-Nitrosodiphenylamine	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Phenanthrene	ug/kg	ND (417) A	53 A/J	420 A/J	ND (380) A
Anthracene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Fluoranthene	ug/kg	ND (417) A	77 A/J	74 A/J	ND (380) A
Pyrene	ug/kg	ND (417) A	63 A/J	320 A/J	ND (380) A
Benzo(a)anthracene	ug/kg	ND (417) A	37 A/J	190 A/J	ND (380) A
Chrysene	ug/kg	ND (417) A	59 A/J	400 A/J	ND (380) A
Di-n-octylphthalate	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Benzo(b)fluoranthene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A
Benzo(k)fluoranthene	ug/kg	ND (417) A	ND (380) A	ND (750) A	ND (380) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B030	IR07B032	IR07B032	IR07B032
Sample Depth(feet):	41.25	1.75	3.75	6.25
Sample Number:	9133M151	9133H847	9133H848	9133H849
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	9108095-12	0598840013SA	0598840014SA	0598840015SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(417) A	ND(380) A	ND(750) A	ND(380) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(417) A	ND(380) A	ND(750) A	ND(380) A
Dibenzo(a,h)anthracene	ug/kg	ND(417) A	ND(380) A	ND(750) A	ND(380) A
Benzo(ghi)perylene	ug/kg	ND(417) A	ND(380) A	ND(750) A	ND(380) A
CLP-PEST/PCB					
Aldrin	ug/kg	NA	ND(46) J5	14 J5/J	ND(9.3) J5
Dieldrin	ug/kg	NA	ND(92) J5	ND(91) J5	ND(19) J5
4,4'-DDE	ug/kg	NA	73 J5/J	ND(91) J5	ND(19) J5
Endrin	ug/kg	NA	ND(92) J5	ND(91) J5	ND(19) J5
4,4'-DDD	ug/kg	NA	150 J5	ND(91) J5	ND(19) J5
4,4'-DDT	ug/kg	NA	25 J5/J	ND(91) J5	ND(19) J5
Methoxychlor	ug/kg	NA	ND(460) J5	ND(450) J5	ND(93) J5
Aroclor-1260	ug/kg	NA	ND(920) J5	ND(910) J5	ND(190) J5
TPH DIESEL					
TPH-Diesel	mg/kg	NA	ND(12) A	ND(11) A	ND(12) A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	ND(12) A	74 A/d	ND(12) A
TPH GAS					
TPH-Gasoline	mg/kg	NA	ND(1.2) A	ND(1.1) A	ND(1.2) A
OIL & GREASE					
Total Oil & Grease	mg/kg	NA	ND(58) J5	3500 J5	ND(58) J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B032	IR07B032	IR07B032	IR07B033
Sample Depth(feet):	11.25	16.75	21.25	1.75
Sample Number:	9133H850	9133H851	9133H852	9133H841
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840016SA	0598840017SA	0598840018SA	0598840007SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
1,1-Dichloroethene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Chloroform	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Methyl ethyl ketone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(11) A
1,1,1-Trichloroethane	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Trichloroethene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Benzene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Bromoform	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Methyl isobutyl ketone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(11) A
2-Hexanone	ug/kg	ND(11) A	ND(12) A	ND(12) A	ND(11) A
Toluene	ug/kg	ND(5) A	ND(6) A	ND(6) A	7 A
Chlorobenzene	ug/kg	ND(5) A	ND(6) A	ND(6) A	ND(5) A
Xylenes	ug/kg	ND(5) A	ND(6) A	ND(6) A	4 A/J
CLP-SOC					
4-Methylphenol	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
n-Nitrosodipropylamine	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Benzoic acid	ug/kg	ND(1700) A	ND(3700) A	ND(2000) A	ND(3500) A
Naphthalene	ug/kg	ND(350) A	ND(770) A	ND(400) A	3500 A
2-Methylnaphthalene	ug/kg	ND(350) A	ND(770) A	ND(400) A	8600 A
Dimethyl phthalate	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Acenaphthene	ug/kg	ND(350) A	ND(770) A	45 A/J	1000 A
Dibenzofuran	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Diethyl phthalate	ug/kg	ND(350) A	290 A/J	ND(400) A	ND(730) A
Fluorene	ug/kg	ND(350) A	ND(770) A	ND(400) A	1900 A
n-Nitrosodiphenylamine	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Phenanthrene	ug/kg	ND(350) A	75 A/J	ND(400) A	8900 A
Anthracene	ug/kg	ND(350) A	ND(770) A	ND(400) A	580 A/J
Fluoranthene	ug/kg	ND(350) A	94 A/J	ND(400) A	410 A/J
Pyrene	ug/kg	ND(350) A	ND(770) A	ND(400) A	2600 A
Benzo(a)anthracene	ug/kg	ND(350) A	ND(770) A	ND(400) A	1500 A
Chrysene	ug/kg	ND(350) A	84 A/J	ND(400) A	2700 A
Di-n-octylphthalate	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Benzo(b)fluoranthene	ug/kg	ND(350) A	88 A/J	ND(400) A	370 A/J
Benzo(k)fluoranthene	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B032	IR07B032	IR07B032	IR07B033
Sample Depth(feet):	11.25	16.75	21.25	1.75
Sample Number:	9133H850	9133H851	9133H852	9133H841
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840016SA	0598840017SA	0598840018SA	0598840007SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(350) A	ND(770) A	ND(400) A	500 A/J
Indeno(1,2,3-cd)pyrene	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Dibenzo(a,h)anthracene	ug/kg	ND(350) A	ND(770) A	ND(400) A	ND(730) A
Benzo(ghi)perylene	ug/kg	ND(350) A	ND(770) A	ND(400) A	110 A/J
CLP-PEST/PCB					
Aldrin	ug/kg	ND(8.5) J5	NA	NA	ND(88) J5
Dieldrin	ug/kg	ND(17) J5	NA	NA	ND(180) J5
4,4'-DDE	ug/kg	ND(17) J5	NA	NA	ND(180) J5
Endrin	ug/kg	ND(17) J5	NA	NA	ND(180) J5
4,4'-DDD	ug/kg	ND(17) J5	NA	NA	ND(180) J5
4,4'-DDT	ug/kg	ND(17) J5	NA	NA	ND(180) J5
Methoxychlor	ug/kg	ND(85) J5	NA	NA	ND(880) J5
Aroclor-1260	ug/kg	ND(170) J5	NA	NA	ND(1800) J5
TPH DIESEL					
TPH-Diesel	mg/kg	ND(11) A	NA	NA	1300 A
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11) A	NA	NA	ND(11) A
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	NA	NA	ND(1.1) A
OIL & GREASE					
Total Oil & Grease	mg/kg	320 J5	NA	NA	4200 A/h

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B033	IR07B033	IR07B033	IR07B033
Sample Depth(feet):	4.25	6.75	11.75	21.25
Sample Number:	9133H842	9133H843	9133H844	9133H845
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840008SA	0598840009SA	0598840010SA	0598840011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	19 A/J	ND(11) A	ND(12) A	ND(13) A
1,1,1-Trichloroethane	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(57) A	ND(11) A	ND(12) A	ND(13) A
2-Hexanone	ug/kg	ND(57) A	ND(11) A	ND(12) A	ND(13) A
Toluene	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Chlorobenzene	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(29) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
n-Nitrosodipropylamine	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Benzoic acid	ug/kg	ND(3700) A	ND(1800) A	ND(1900) A	ND(2000) A
Naphthalene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
2-Methylnaphthalene	ug/kg	250 A/J	ND(370) A	ND(380) A	ND(420) A
Dimethyl phthalate	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Acenaphthene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Dibenzofuran	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Diethyl phthalate	ug/kg	260 A/J	ND(370) A	ND(380) A	ND(420) A
Fluorene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
n-Nitrosodiphenylamine	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Phenanthrene	ug/kg	92 A/J	47 A/J	ND(380) A	ND(420) A
Anthracene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Fluoranthene	ug/kg	ND(760) A	41 A/J	ND(380) A	ND(420) A
Pyrene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Benzo(a)anthracene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Chrysene	ug/kg	ND(760) A	48 A/J	ND(380) A	ND(420) A
Di-n-octylphthalate	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Benzo(b)fluoranthene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Benzo(k)fluoranthene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B033	IR07B033	IR07B033	IR07B033
Sample Depth(feet):	4.25	6.75	11.75	21.25
Sample Number:	9133H842	9133H843	9133H844	9133H845
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840008SA	0598840009SA	0598840010SA	0598840011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Dibenzo(a,h)anthracene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
Benzo(ghi)perylene	ug/kg	ND(760) A	ND(370) A	ND(380) A	ND(420) A
CLP-PEST/PCB					
Aldrin	ug/kg	ND(9.2) J5	ND(9.1) J5	ND(9.3) J5	NA
Dieldrin	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	NA
4,4'-DDE	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	NA
Endrin	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	NA
4,4'-DDD	ug/kg	6.6 J5/J	ND(18) J5	ND(19) J5	NA
4,4'-DDT	ug/kg	ND(18) J5	ND(18) J5	ND(19) J5	NA
Methoxychlor	ug/kg	ND(92) J5	ND(91) J5	ND(93) J5	NA
Aroclor-1260	ug/kg	ND(180) J5	ND(180) J5	ND(190) J5	NA
TPH DIESEL					
TPH-Diesel	mg/kg	47 A	ND(11) A	ND(12) A	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	ND(11) A	ND(11) A	ND(12) A	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(1.1) A	ND(1.1) A	ND(1.2) A	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	6000 J5	81 J5	300 J5	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07B033	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	31.25	1.75	3.75	6.25
Sample Number:	9133H846	9132H815	9132H816	9132H817
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0598840012SA	9108094-01	9108094-02	9108094-03

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	4 A/J	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(13) A	ND(12) A	ND(12) A	ND(12) A
1,1,1-Trichloroethane	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(13) A	ND(12) A	ND(12) A	10.69 A/J
2-Hexanone	ug/kg	ND(13) A	ND(12) A	ND(12) A	ND(12) A
Toluene	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Chlorobenzene	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(7) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
n-Nitrosodipropylamine	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Benzoic acid	ug/kg	ND(2100) A	ND(19608) A	ND(1938) A	ND(19841) A
Naphthalene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
2-Methylnaphthalene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Dimethyl phthalate	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Acenaphthene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Dibenzofuran	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Diethyl phthalate	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Fluorene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
n-Nitrosodiphenylamine	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Phenanthrene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Anthracene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Fluoranthene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Pyrene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Benzo(a)anthracene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Chrysene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Di-n-octylphthalate	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Benzo(b)fluoranthene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A
Benzo(k)fluoranthene	ug/kg	ND(440) A	ND(3922) A	ND(388) A	ND(3968) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B033	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	31.25	1.75	3.75	6.25
Sample Number:	9133H846	9132H815	9132H816	9132H817
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0598840012SA	9108094-01	9108094-02	9108094-03

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(440)	A	ND(3922)	A	ND(388)	A	ND(3968)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(440)	A	ND(3922)	A	ND(388)	A	ND(3968)	A
Dibenzo(a,h)anthracene	ug/kg	ND(440)	A	ND(3922)	A	ND(388)	A	ND(3968)	A
Benzo(ghi)perylene	ug/kg	ND(440)	A	ND(3922)	A	ND(388)	A	ND(3968)	A
CLP-PEST/PCB									
Aldrin	ug/kg	NA		ND(9)	A	ND(9)	A	ND(9)	A
Dieldrin	ug/kg	NA		ND(19)	A	ND(19)	A	ND(19)	A
4,4'-DDE	ug/kg	NA		ND(19)	A	ND(19)	A	ND(19)	A
Endrin	ug/kg	NA		ND(19)	A	ND(19)	A	ND(19)	A
4,4'-DDD	ug/kg	NA		ND(19)	A	ND(19)	A	ND(19)	A
4,4'-DDT	ug/kg	NA		ND(19)	A	ND(19)	A	ND(19)	A
Methoxychlor	ug/kg	NA		ND(94)	A	ND(93)	A	ND(95)	A
Aroclor-1260	ug/kg	NA		ND(188)	A	ND(186)	A	ND(190)	A
TPH DIESEL									
TPH-Diesel	mg/kg	NA		44	A	ND(11.6)	A	ND(11.9)	A
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		ND(5)	A	ND(5)	A	ND(5)	A
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		110	A	81	A	3900	A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B034	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	11.25	16.25	20.75	31.75
Sample Number:	9132H818	9132H819	9132H820	9132H821
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	9108094-04	9108094-05	9108094-06	9108094-07

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
1,1-Dichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Chloroform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl ethyl ketone	ug/kg	ND(13) A	ND(13) A	ND(12) A	12.22 A/J
1,1,1-Trichloroethane	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Trichloroethene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Benzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Bromoform	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Methyl isobutyl ketone	ug/kg	ND(13) A	ND(13) A	ND(12) A	ND(12) A
2-Hexanone	ug/kg	ND(13) A	ND(13) A	ND(12) A	ND(12) A
Toluene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Chlorobenzene	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
Xylenes	ug/kg	ND(6) A	ND(6) A	ND(6) A	ND(6) A
CLP-SOC					
4-Methylphenol	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
n-Nitrosodipropylamine	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Benzoic acid	ug/kg	ND(2110) A	ND(2137) A	ND(2033) A	ND(2058) A
Naphthalene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
2-Methylnaphthalene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Dimethyl phthalate	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Acenaphthene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Dibenzofuran	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Diethyl phthalate	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Fluorene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
n-Nitrosodiphenylamine	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Phenanthrene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Anthracene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Fluoranthene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Pyrene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Benzo(a)anthracene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Chrysene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Di-n-octylphthalate	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Benzo(b)fluoranthene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A
Benzo(k)fluoranthene	ug/kg	ND(422) A	ND(427) A	ND(407) A	ND(412) A

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B034	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	11.25	16.25	20.75	31.75
Sample Number:	9132H818	9132H819	9132H820	9132H821
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	9108094-04	9108094-05	9108094-06	9108094-07

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(422)	A	ND(427)	A	ND(407)	A	ND(412)	A
Indeno(1,2,3-cd)pyrene	ug/kg	ND(422)	A	ND(427)	A	ND(407)	A	ND(412)	A
Dibenzo(a,h)anthracene	ug/kg	ND(422)	A	ND(427)	A	ND(407)	A	ND(412)	A
Benzo(ghi)perylene	ug/kg	ND(422)	A	ND(427)	A	ND(407)	A	ND(412)	A
CLP-PEST/PCB									
Aldrin	ug/kg	ND(10)	A	NA		NA		NA	
Dieldrin	ug/kg	ND(20)	A	NA		NA		NA	
4,4'-DDE	ug/kg	ND(20)	A	NA		NA		NA	
Endrin	ug/kg	ND(20)	A	NA		NA		NA	
4,4'-DDD	ug/kg	ND(20)	A	NA		NA		NA	
4,4'-DDT	ug/kg	ND(20)	A	NA		NA		NA	
Methoxychlor	ug/kg	ND(101)	A	NA		NA		NA	
Aroclor-1260	ug/kg	ND(203)	A	NA		NA		NA	
TPH DIESEL									
TPH-Diesel	mg/kg	ND(12.7)	A	NA		NA		NA	
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	ND(5)	A	NA		NA		NA	
OIL & GREASE									
Total Oil & Grease	mg/kg	80	A	NA		NA		NA	

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B034	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	41.25	0.75	2.75	5.25
Sample Number:	9132H822	9049G564	9049G565	9049G566
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9108094-08	9012066-01A	9012066-02A	9012066-03A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(7)	A	3	J35/J	2	J35/J	ND(6)	R1/U
1,1-Dichloroethene	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Chloroform	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Methyl ethyl ketone	ug/kg	ND(13)	A	ND(12)	R1J3/U	ND(13)	R1J3/U	ND(12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Trichloroethene	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Benzene	ug/kg	ND(7)	A	ND(2)	U1J35/B	ND(3)	U1J35/B	ND(4)	U1J5/BJ
Bromoform	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Methyl isobutyl ketone	ug/kg	ND(13)	A	ND(12)	R1J3/U	ND(13)	R1J3/U	ND(12)	R1/U
2-Hexanone	ug/kg	ND(13)	A	ND(12)	R1J3/U	ND(13)	R1J3/U	ND(12)	R1/U
Toluene	ug/kg	ND(7)	A	ND(7)	U1J35/B	ND(5)	U1J35/B	ND(8)	U1J5/B
Chlorobenzene	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
Xylenes	ug/kg	ND(7)	A	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
n-Nitrosodipropylamine	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Benzoic acid	ug/kg	ND(2222)	A	ND(2000)	R1/U	ND(2200)	R12/U	ND(2100)	R1/U
Naphthalene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
2-Methylnaphthalene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Dimethyl phthalate	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Acanaphthene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Dibenzofuran	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Diethyl phthalate	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Fluorene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
n-Nitrosodiphenylamine	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Phenanthrene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Anthracene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Fluoranthene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Pyrene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Benzo(a)anthracene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Chrysene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Di-n-octylphthalate	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Benzo(b)fluoranthene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U
Benzo(k)fluoranthene	ug/kg	ND(444)	A	ND(420)	R1/U	ND(450)	R12/U	ND(430)	R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B034	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	41.25	0.75	2.75	5.25
Sample Number:	9132H822	9049G564	9049G565	9049G566
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9108094-08	9012066-01A	9012066-02A	9012066-03A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(444) A	ND(420) R1/U	ND(450) R12/U	ND(430) R1/U
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(444) A	ND(420) R1/U	ND(450) R12/U	ND(430) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(444) A	ND(420) R1/U	ND(450) R12/U	ND(430) R1/U
Benzo(ghi)perylene	ug/kg	ND(444) A	ND(420) R1/U	ND(450) R12/U	ND(430) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	NA	ND(19) R1/U	ND(20) R1/U	ND(19) R1/U
Dieldrin	ug/kg	NA	ND(37) R1/U	ND(40) R1/U	ND(37) R1/U
4,4'-DDE	ug/kg	NA	ND(37) R1/U	ND(40) R1/U	ND(37) R1/U
Endrin	ug/kg	NA	ND(37) R1/U	ND(40) R1/U	ND(37) R1/U
4,4'-DDD	ug/kg	NA	ND(37) R1/U	ND(40) R1/U	ND(37) R1/U
4,4'-DDT	ug/kg	NA	ND(37) R1/U	ND(40) R1/U	ND(37) R1/U
Methoxychlor	ug/kg	NA	ND(190) R1/U	ND(200) R1/U	ND(190) R1/U
Aroclor-1260	ug/kg	NA	ND(370) R1/U	ND(400) R1/U	ND(370) R1/U
TPH DIESEL					
TPH-Diesel	mg/kg	NA	ND(23) J5/U	ND(25) J5/U	ND(23) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	NA	ND(0.59) J53/U	ND(0.68) J53/U	ND(0.54) J53/U
OIL & GREASE					
Total Oil & Grease	mg/kg	NA	830 J5	730 J5	ND(580) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW19A	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	10.25	15.25	20.25	29.75
Sample Number:	9049G567	9049G568	9049G569	9049G570
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012066-04A	9012066-05A	9012066-06A	9012066-07A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
1,1-Dichloroethene	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Chloroform	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Methyl ethyl ketone	ug/kg	ND (13) R1J3/U	ND (13) R1/U	ND (12) R1/U	ND (12) R1/U
1,1,1-Trichloroethane	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Trichloroethene	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Benzene	ug/kg	ND (7) U1J35/B	ND (7) U1J5/B	ND (4) U1J5/BJ	ND (6) R1/U
Bromoform	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Methyl isobutyl ketone	ug/kg	ND (13) R1J3/U	ND (13) R1/U	ND (12) R1/U	ND (12) R1/U
2-Hexanone	ug/kg	ND (13) R1J3/U	ND (13) R1/U	ND (12) R1/U	ND (12) R1/U
Toluene	ug/kg	ND (6) U1J35/B	ND (6) U1J5/BJ	ND (6) U1J5/BJ	ND (6) R1/U
Chlorobenzene	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Xylenes	ug/kg	ND (6) R1J3/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
n-Nitrosodipropylamine	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Benzoic acid	ug/kg	ND (2200) R1/U	ND (2000) R1/U	ND (1900) R1/U	ND (1900) R1/U
Naphthalene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
2-Methylnaphthalene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Dimethyl phthalate	ug/kg	870 J5	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Acenaphthene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Dibenzofuran	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Diethyl phthalate	ug/kg	750 J5	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Fluorene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
n-Nitrosodiphenylamine	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	210 J5/J
Phenanthrene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Anthracene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Fluoranthene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Pyrene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Benzo(a)anthracene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Chrysene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Di-n-octylphthalate	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Benzo(b)fluoranthene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U
Benzo(k)fluoranthene	ug/kg	ND (460) R1/U	ND (410) R1/U	ND (380) R1/U	ND (400) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	10.25	15.25	20.25	29.75
Sample Number:	9049G567	9049G568	9049G569	9049G570
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012066-04A	9012066-05A	9012066-06A	9012066-07A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(460) R1/U	ND(410) R1/U	ND(380) R1/U	ND(400) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(460) R1/U	ND(410) R1/U	ND(380) R1/U	ND(400) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(460) R1/U	ND(410) R1/U	ND(380) R1/U	ND(400) R1/U
Benzo(ghi)perylene	ug/kg	ND(460) R1/U	ND(410) R1/U	ND(380) R1/U	ND(400) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(20) R1/U	NA	NA	NA
Dieldrin	ug/kg	ND(41) R1/U	NA	NA	NA
4,4'-DDE	ug/kg	ND(41) R1/U	NA	NA	NA
Endrin	ug/kg	ND(41) R1/U	NA	NA	NA
4,4'-DDD	ug/kg	ND(41) R1/U	NA	NA	NA
4,4'-DDT	ug/kg	ND(41) R1/U	NA	NA	NA
Methoxychlor	ug/kg	ND(200) R1/U	NA	NA	NA
Aroclor-1260	ug/kg	ND(400) R1/U	NA	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(25) J5/U	NA	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.7) J53/U	NA	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(640) J5/U	NA	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	40.25	49.75	1.25	2.75
Sample Number:	9049G571	9049G572	9049G575	9049G576
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/07/90	12/07/90
Lab Sample Number:	9012066-08A	9012066-09A	9012068-01A	9012068-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
1,1-Dichloroethene	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Chloroform	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Methyl ethyl ketone	ug/kg	ND(12) R1/U	ND(12) R1J3/U	ND(12) R1/U	ND(11) R1/U
1,1,1-Trichloroethane	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Trichloroethene	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Benzene	ug/kg	ND(4) U1J5/BJ	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Bromoform	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Methyl isobutyl ketone	ug/kg	ND(12) R1/U	ND(12) R1J3/U	ND(12) R1/U	ND(11) R1/U
2-Hexanone	ug/kg	ND(12) R1/U	ND(12) R1J3/U	ND(12) R1/U	ND(11) R1/U
Toluene	ug/kg	ND(10) U1J5/B	ND(5) U1J35/B	ND(7) U1J5	ND(9) U1J5
Chlorobenzene	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
Xylenes	ug/kg	ND(6) R1/U	ND(6) R1J3/U	ND(6) R1/U	ND(6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
n-Nitrosodipropylamine	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Benzoic acid	ug/kg	ND(1900) R1/U	ND(1900) R1/U	ND(2000) R1/U	ND(1900) R1/U
Naphthalene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
2-Methylnaphthalene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Dimethyl phthalate	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Acenaphthene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Dibenzofuran	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Diethyl phthalate	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Fluorene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
n-Nitrosodiphenylamine	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	180 J5/J
Phenanthrene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Anthracene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Fluoranthene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Pyrene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Benzo(a)anthracene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Chrysene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Di-n-octylphthalate	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Benzo(b)fluoranthene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U
Benzo(k)fluoranthene	ug/kg	ND(400) R1/U	ND(400) R1/U	ND(410) R1/U	ND(390) R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	40.25	49.75	1.25	2.75
Sample Number:	9049G571	9049G572	9049G575	9049G576
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/07/90	12/07/90
Lab Sample Number:	9012066-08A	9012066-09A	9012068-01A	9012068-02A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(400)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(390)	R1/U
Indeno(1, 2, 3-cd)pyrene	ug/kg	ND(400)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(390)	R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(400)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(390)	R1/U
Benzo(ghi)perylene	ug/kg	ND(400)	R1/U	ND(400)	R1/U	ND(410)	R1/U	ND(390)	R1/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND(18)	R1/U	ND(17)	R1/U
Dieldrin	ug/kg	NA		NA		ND(37)	R1/U	ND(34)	R1/U
4, 4'-DDE	ug/kg	NA		NA		ND(37)	R1/U	ND(34)	R1/U
Endrin	ug/kg	NA		NA		ND(37)	R1/U	ND(34)	R1/U
4, 4'-DDD	ug/kg	NA		NA		ND(37)	R1/U	ND(34)	R1/U
4, 4'-DDT	ug/kg	NA		NA		ND(37)	R1/U	ND(34)	R1/U
Methoxychlor	ug/kg	NA		NA		ND(180)	R1/U	ND(170)	R1/U
Aroclor-1260	ug/kg	NA		NA		ND(370)	R1/U	ND(340)	R1/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND(23)	J5/U	ND(22)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND(0.6)	J53/U	ND(0.59)	J53/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		ND(580)	J5/U	ND(560)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	5.25	10.25	15.25	20.25
Sample Number:	9049G577	9049G578	9049G579	9049G580
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012068-03A	9012068-04A	9012068-05A	9012068-06A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
1,1-Dichloroethene	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Chloroform	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Methyl ethyl ketone	ug/kg	ND(12)	R1/U	ND(14)	R1/U	ND(12)	R1/U	ND(12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Trichloroethene	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Benzene	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Bromoform	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Methyl isobutyl ketone	ug/kg	ND(12)	R1/U	ND(14)	R1/U	ND(12)	R1/U	ND(12)	R1/U
2-Hexanone	ug/kg	ND(12)	R1/U	ND(14)	R1/U	ND(12)	R1/U	ND(12)	R1/U
Toluene	ug/kg	ND(10)	U1J5	ND(3)	U1J5/J	ND(2)	U1J5/J	ND(3)	U1J5/J
Chlorobenzene	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
Xylenes	ug/kg	ND(6)	R1/U	ND(7)	R1/U	ND(6)	R1/U	ND(6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
n-Nitrosodipropylamine	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Benzoic acid	ug/kg	ND(2100)	R1/U	ND(2400)	R12/U	ND(1900)	R1/U	ND(1900)	R12/U
Naphthalene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
2-Methylnaphthalene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Dimethyl phthalate	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Acenaphthene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Dibenzofuran	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Diethyl phthalate	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Fluorene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
n-Nitrosodiphenylamine	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Phenanthrene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Anthracene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Fluoranthene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Pyrene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Benzo(a)anthracene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Chrysene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Di-n-octylphthalate	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Benzo(b)fluoranthene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U
Benzo(k)fluoranthene	ug/kg	ND(420)	R1/U	ND(490)	R12/U	ND(390)	R1/U	ND(390)	R12/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	5.25	10.25	15.25	20.25
Sample Number:	9049G577	9049G578	9049G579	9049G580
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012068-03A	9012068-04A	9012068-05A	9012068-06A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(420) R1/U	ND(490) R12/U	ND(390) R1/U	ND(390) R12/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(420) R1/U	ND(490) R12/U	ND(390) R1/U	ND(390) R12/U
Dibenzo(a,h)anthracene	ug/kg	ND(420) R1/U	ND(490) R12/U	ND(390) R1/U	ND(390) R12/U
Benzo(ghi)perylene	ug/kg	ND(420) R1/U	ND(490) R12/U	ND(390) R1/U	ND(390) R12/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(19) R1/U	ND(22) R1/U	NA	NA
Dieldrin	ug/kg	ND(37) R1/U	ND(44) R1/U	NA	NA
4,4'-DDE	ug/kg	ND(37) R1/U	ND(44) R1/U	NA	NA
Endrin	ug/kg	ND(37) R1/U	ND(44) R1/U	NA	NA
4,4'-DDD	ug/kg	ND(37) R1/U	ND(44) R1/U	NA	NA
4,4'-DDT	ug/kg	ND(37) R1/U	ND(44) R1/U	NA	NA
Methoxychlor	ug/kg	ND(190) R1/U	ND(220) R1/U	NA	NA
Aroclor-1260	ug/kg	ND(370) R1/U	ND(440) R1/U	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(24) J5/U	ND(27) J5/U	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.58) J53/U	ND(0.61) J53/U	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(590) J5/U	ND(670) J5/U	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	30.75	40.75	0.62	2.62
Sample Number:	9049G581	9049G582	9049G547	9049G548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/04/90	12/04/90
Lab Sample Number:	9012068-07A	9012068-08A	9012041-02A	9012041-03A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
1,1-Dichloroethene	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Chloroform	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U		J5
Methyl ethyl ketone	ug/kg	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Trichloroethylene	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Benzene	ug/kg	ND (2)	U1J35/J	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Bromoform	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Methyl isobutyl ketone	ug/kg	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1/U
2-Hexanone	ug/kg	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1J3/U	ND (12)	R1/U
Toluene	ug/kg	ND (5)	U1J35/J	ND (4)	U1J35/J	ND (6)	R1J3/U	ND (6)	R1/U
Chlorobenzene	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
Xylenes	ug/kg	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1J3/U	ND (6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
n-Nitrosodipropylamine	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Benzoic acid	ug/kg	ND (1800)	R1/U	ND (2000)	R1/U	ND (2000)	J5/U	ND (2000)	J5/U
Naphthalene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
2-Methylnaphthalene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Dimethyl phthalate	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Acenaphthene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Dibenzofuran	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Diethyl phthalate	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Fluorene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
n-Nitrosodiphenylamine	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Phenanthrene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Anthracene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Fluoranthene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Pyrene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Benzo(a)anthracene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Chrysene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Di-n-octylphthalate	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Benzo(b)fluoranthene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U
Benzo(k)fluoranthene	ug/kg	ND (380)	R1/U	ND (400)	R1/U	ND (400)	J5/U	ND (420)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	30.75	40.75	0.62	2.62
Sample Number:	9049G581	9049G582	9049G547	9049G548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/04/90	12/04/90
Lab Sample Number:	9012068-07A	9012068-08A	9012041-02A	9012041-03A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(380) R1/U	ND(400) R1/U	ND(400) J5/U	ND(420) J5/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(380) R1/U	ND(400) R1/U	ND(400) J5/U	ND(420) J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(380) R1/U	ND(400) R1/U	ND(400) J5/U	ND(420) J5/U
Benzo(ghi)perylene	ug/kg	ND(380) R1/U	ND(400) R1/U	ND(400) J5/U	ND(420) J5/U
CLP-PEST/PCB					
Aldrin	ug/kg	NA	NA	ND(36) J5/U	ND(36) J35/U
Dieldrin	ug/kg	NA	NA	ND(71) J5/U	ND(73) J35/U
4,4'-DDE	ug/kg	NA	NA	ND(71) J5/U	ND(73) J35/U
Endrin	ug/kg	NA	NA	ND(71) J5/U	ND(73) J35/U
4,4'-DDD	ug/kg	NA	NA	ND(71) J5/U	ND(73) J35/U
4,4'-DDT	ug/kg	NA	NA	ND(71) J5/U	ND(73) J35/U
Methoxychlor	ug/kg	NA	NA	ND(360) J5/U	ND(360) J35/U
Aroclor-1260	ug/kg	NA	NA	ND(710) J5/U	ND(730) J35/U
TPH DIESEL					
TPH-Diesel	mg/kg	NA	NA	ND(21) J5/U	ND(22) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	NA	NA	ND(0.59) R1/U	ND(0.56) R1/U
OIL & GREASE					
Total Oil & Grease	mg/kg	NA	NA	ND(580) J5/U	ND(560) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	5.62	10.12	15.12	19.62
Sample Number:	9049G549	9049G550	9049G551	9049G552
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012041-04A	9012041-05A	9012041-06A	9012041-07A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
Carbon disulfide	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	5 J5/J
1,1-Dichloroethene	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Chloroform	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Methyl ethyl ketone	ug/kg	ND (11) R1/U	ND (12) R1/U	ND (13) R1/U	ND (12) R1/U
1,1,1-Trichloroethane	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Trichloroethene	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Benzene	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Bromoform	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Methyl isobutyl ketone	ug/kg	ND (11) R1/U	ND (12) R1/U	ND (13) R1/U	ND (12) R1/U
2-Hexanone	ug/kg	ND (11) R1/U	ND (12) R1/U	ND (13) R1/U	ND (12) R1/U
Toluene	ug/kg	ND (6) R1/U	ND (3) U1J5/J	ND (2) U1J5/J	13 J5F
Chlorobenzene	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
Xylenes	ug/kg	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U	ND (6) R1/U
CLP-SOC					
4-Methylphenol	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
n-Nitrosodipropylamine	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Benzoic acid	ug/kg	ND (16000) J5/U	ND (2000) J5/U	ND (2000) J5/U	ND (2200) J5/U
Naphthalene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
2-Methylnaphthalene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Dimethyl phthalate	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Acenaphthene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Dibenzofuran	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Diethyl phthalate	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Fluorene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
n-Nitrosodiphenylamine	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Phenanthren	ug/kg	3800 J5/D	490 J5	ND (420) J5/U	ND (450) J5/U
Anthracene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Fluoranthene	ug/kg	3200 J5/DJ	450 J5	ND (420) J5/U	ND (450) J5/U
Pyrene	ug/kg	5200 J5/D	620 J5	ND (420) J5/U	ND (450) J5/U
Benzo(a)anthracene	ug/kg	1900 J5/DJ	280 J5/J	ND (420) J5/U	ND (450) J5/U
Chrysene	ug/kg	ND (3400) J5/U	370 J5/J	ND (420) J5/U	ND (450) J5/U
Di-n-octylphthalate	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Benzo(b)fluoranthene	ug/kg	ND (3400) J5/U	ND (410) J5/U	ND (420) J5/U	ND (450) J5/U
Benzo(k)fluoranthene	ug/kg	1500 J5/DJ	340 J5/J	ND (420) J5/U	ND (450) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	5.62	10.12	15.12	19.62
Sample Number:	9049G549	9049G550	9049G551	9049G552
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012041-04A	9012041-05A	9012041-06A	9012041-07A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	1900 J5/DJ	300 J5/J	ND(420) J5/U	ND(450) J5/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(3400) J5/U	ND(410) J5/U	ND(420) J5/U	ND(450) J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(3400) J5/U	ND(410) J5/U	ND(420) J5/U	ND(450) J5/U
Benzo(ghi)perylene	ug/kg	ND(3400) J5/U	ND(410) J5/U	ND(420) J5/U	ND(450) J5/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(36) J5/U	ND(37) J5/U	NA	NA
Dieldrin	ug/kg	ND(72) J5/U	ND(73) J5/U	NA	NA
4,4'-DDE	ug/kg	ND(72) J5/U	ND(73) J5/U	NA	NA
Endrin	ug/kg	ND(72) J5/U	ND(73) J5/U	NA	NA
4,4'-DDD	ug/kg	ND(72) J5/U	ND(73) J5/U	NA	NA
4,4'-DDT	ug/kg	ND(72) J5/U	ND(73) J5/U	NA	NA
Methoxychlor	ug/kg	ND(360) J5/U	ND(370) J5/U	NA	NA
Aroclor-1260	ug/kg	ND(720) J5/U	ND(730) J5/U	NA	NA
TPH DIESEL					
TPH-Diesel	mg/kg	ND(22) J5/U	ND(24) J5/U	NA	NA
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.56) R1/U	ND(0.58) R1/U	NA	NA
OIL & GREASE					
Total Oil & Grease	mg/kg	ND(560) J5/U	640 J5	NA	NA

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07MW21A2	IR07MW21A2	IR07MW23A	IR07MW23A
Sample Depth(feet):	30.62	35.62	1.75	3.75
Sample Number:	9049G553	9049G554	9049H572	9049H573
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/06/90	12/06/90
Lab Sample Number:	9012041-08A	9012041-09A	9012069-01A	9012069-02A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(6)	R1J3/U	14	J35	ND(5)	R1/U	ND(6)	R1/U
1,1-Dichloroethene	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Chloroform	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Methyl ethyl ketone	ug/kg	ND(11)	R1J3/U	ND(11)	R1J3/U	ND(11)	R1/U	ND(12)	R1/U
1,1,1-Trichloroethane	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Trichloroethene	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Benzene	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(7)	UL5
Bromoform	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Methyl isobutyl ketone	ug/kg	ND(11)	R1J3/U	ND(11)	R1J3/U	ND(11)	R1/U	ND(12)	R1/U
2-Hexanone	ug/kg	ND(11)	R1J3/U	ND(11)	R1J3/U	ND(11)	R1/U	ND(12)	R1/U
Toluene	ug/kg	ND(5)	U1J35/J	52	J35F	ND(1)	U1J5/BJ	ND(10)	U1J5
Chlorobenzene	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
Xylenes	ug/kg	ND(6)	R1J3/U	ND(6)	R1J3/U	ND(5)	R1/U	ND(6)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
n-Nitrosodipropylamine	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	790	J5
Benzoic acid	ug/kg	ND(18000)	J5/U	ND(1800)	J5/U	ND(1900)	J5/U	ND(2100)	J5/U
Naphthalene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
2-Methylnaphthalene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Dimethyl phthalate	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Acenaphthene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Dibenzo-furan	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Diethyl phthalate	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Fluorene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
n-Nitrosodiphenylamine	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Phenanthrene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Anthracene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Fluoranthene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Pyrene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Benzo(a)anthracene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Chrysene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Di-n-octylphthalate	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Benzo(b)fluoranthene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Benzo(k)fluoranthene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW23A	IR07MW23A
Sample Depth(feet):	30.62	35.62	1.75	3.75
Sample Number:	9049G553	9049G554	9049H572	9049H573
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/06/90	12/06/90
Lab Sample Number:	9012041-08A	9012041-09A	9012069-01A	9012069-02A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-SOC (cont.)									
Benzo(a)pyrene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Dibenzo(a,h)anthracene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
Benzo(ghi)perylene	ug/kg	ND(3600)	J5/U	ND(370)	J5/U	ND(400)	J5/U	ND(420)	J5/U
CLP-PEST/PCB									
Aldrin	ug/kg	NA		NA		ND(35)	J35/U	ND(38)	J5/U
Dieldrin	ug/kg	NA		NA		ND(70)	J35/U	ND(75)	J5/U
4,4'-DDE	ug/kg	NA		NA		ND(70)	J35/U	ND(75)	J5/U
Endrin	ug/kg	NA		NA		ND(70)	J35/U	ND(75)	J5/U
4,4'-DDD	ug/kg	NA		NA		ND(70)	J35/U	ND(75)	J5/U
4,4'-DDT	ug/kg	NA		NA		ND(70)	J35/U	ND(75)	J5/U
Methoxychlor	ug/kg	NA		NA		ND(350)	J35/U	ND(380)	J5/U
Aroclor-1260	ug/kg	NA		NA		ND(700)	J35/U	ND(750)	J5/U
TPH DIESEL									
TPH-Diesel	mg/kg	NA		NA		ND(22)	J5/U	ND(23)	J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA		NA		NA		NA	
TPH GAS									
TPH-Gasoline	mg/kg	NA		NA		ND(0.55)	J53/U	ND(0.59)	J53/U
OIL & GREASE									
Total Oil & Grease	mg/kg	NA		NA		700	J5	2920	J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW23A	IR07MW23A	IR07MW23A	IR07SS26
Sample Depth(feet):	6.25	11.25	15.25	0.00
Sample Number:	9049H574	9049H575	9049H576	9049N240
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/07/90
Lab Sample Number:	9012069-03A	9012069-04A	9012069-05A	9012072-04A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
Carbon disulfide	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
1,1-Dichloroethene	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Chloroform	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Methyl ethyl ketone	ug/kg	ND(11)	R1/U	ND(12)	R1/U	ND(14)	R1J3/U	ND(6)	U1J5/BJ
1,1,1-Trichloroethane	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Trichloroethene	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Benzene	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Bromoform	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Methyl isobutyl ketone	ug/kg	ND(11)	R1/U	11	J5/J	ND(14)	R1J3/U	ND(11)	R1/U
2-Hexanone	ug/kg	ND(11)	R1/U	ND(12)	R1/U	ND(14)	R1J3/U	ND(11)	R1/U
Toluene	ug/kg	ND(2)	U1J5/BJ	ND(16)	U1J5/B	ND(21)	U1J35/B	ND(5)	R1/U
Chlorobenzene	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
Xylenes	ug/kg	ND(5)	R1/U	ND(6)	R1/U	ND(7)	R1J3/U	ND(5)	R1/U
CLP-SOC									
4-Methylphenol	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
n-Nitrosodipropylamine	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Benzoic acid	ug/kg	ND(3700)	J5/U	ND(20000)	J35/U	ND(2200)	R1J3/U	ND(1800)	R1/U
Naphthalene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
2-Methylnaphthalene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Dimethyl phthalate	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Acenaphthene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Dibenzofuran	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Diethyl phthalate	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Fluorene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
n-Nitrosodiphenylamine	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Phenanthrene	ug/kg	340	J5/DJ	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Anthracene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Fluoranthene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Pyrene	ug/kg	330	J5/DJ	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Benzo(a)anthracene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Chrysene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Di-n-octylphthalate	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Benzo(b)fluoranthene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U
Benzo(k)fluoranthene	ug/kg	ND(770)	J5/U	ND(4200)	J35/U	ND(460)	R1J3/U	ND(380)	R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW23A	IR07MW23A	IR07MW23A	IR07SS26
Sample Depth(feet):	6.25	11.25	15.25	0.00
Sample Number:	9049H574	9049H575	9049H576	9049N240
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/07/90
Lab Sample Number:	9012069-03A	9012069-04A	9012069-05A	9012072-04A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-SOC (cont.)					
Benzo(a)pyrene	ug/kg	ND(770) J5/U	ND(4200) J35/U	ND(460) R1J3/U	ND(380) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(770) J5/U	ND(4200) J35/U	ND(460) R1J3/U	ND(380) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(770) J5/U	ND(4200) J35/U	ND(460) R1J3/U	ND(380) R1/U
Benzo(ghi)perylene	ug/kg	ND(770) J5/U	ND(4200) J35/U	ND(460) R1J3/U	ND(380) R1/U
CLP-PEST/PCB					
Aldrin	ug/kg	ND(34) J5/U	ND(37) J5/U	NA	ND(33) R1/U
Dieldrin	ug/kg	ND(68) J5/U	ND(73) J5/U	NA	ND(67) R1/U
4,4'-DDE	ug/kg	ND(68) J5/U	ND(73) J5/U	NA	ND(67) R1/U
Endrin	ug/kg	ND(68) J5/U	ND(73) J5/U	NA	ND(67) R1/U
4,4'-DDD	ug/kg	ND(68) J5/U	ND(73) J5/U	NA	ND(67) R1/U
4,4'-DDT	ug/kg	ND(68) J5/U	ND(73) J5/U	NA	ND(67) R1/U
Methoxychlor	ug/kg	ND(340) J5/U	ND(370) J5/U	NA	ND(330) R1/U
Aroclor-1260	ug/kg	ND(680) J5/U	ND(730) J5/U	NA	210 J5/J
TPH DIESEL					
TPH-Diesel	mg/kg	ND(21) J5/U	ND(23) J5/U	NA	ND(20) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA	NA
TPH GAS					
TPH-Gasoline	mg/kg	ND(0.54) J53/U	ND(0.58) J53/U	NA	ND(0.53) R1/U
OIL & GREASE					
Total Oil & Grease	mg/kg	2170 J5	ND(580) J5/U	NA	ND(520) J5/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
 Analytical Results for Organic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

Station Number:	IR07SS27	IR07SS28	IR07SS29
Sample Depth(feet):	0.00	0.00	0.00
Sample Number:	9049N239	9049N238	9049N237
Matrix:	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012072-03A	9012072-02A	9012072-01A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual
CLP-VOC							
Carbon disulfide	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
1,1-Dichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Chloroform	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Methyl ethyl ketone	ug/kg	ND(4)	ULJ5/BJ	ND(12)	R1/U	ND(8)	ULJ5/BJ
1,1,1-Trichloroethane	ug/kg	3	J5/J	ND(6)	R1/U	ND(7)	R1/U
Trichloroethene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Benzene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Bromoform	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Methyl isobutyl ketone	ug/kg	ND(12)	R1/U	ND(12)	R1/U	ND(13)	R1/U
2-Hexanone	ug/kg	ND(12)	R1/U	ND(12)	R1/U	ND(13)	R1/U
Toluene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Chlorobenzene	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
Xylenes	ug/kg	ND(6)	R1/U	ND(6)	R1/U	ND(7)	R1/U
CLP-SOC							
4-Methylphenol	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
n-Nitrosodipropylamine	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Benzoic acid	ug/kg	ND(2000)	R1/U	ND(2100)	R1/U	ND(2300)	R1/U
Naphthalene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
2-Methylnaphthalene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Dimethyl phthalate	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Acenaphthene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Dibenzofuran	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Diethyl phthalate	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Fluorene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
n-Nitrosodiphenylamine	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Phenanthrene	ug/kg	ND(410)	R1/U	180	J5/J	ND(470)	R1/U
Anthracene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Fluoranthene	ug/kg	ND(410)	R1/U	260	J5/J	ND(470)	R1/U
Pyrene	ug/kg	ND(410)	R1/U	250	J5/J	ND(470)	R1/U
Benzo(a)anthracene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Chrysene	ug/kg	ND(410)	R1/U	170	J5/J	ND(470)	R1/U
Di-n-octylphthalate	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U
Benzo(b)fluoranthene	ug/kg	ND(410)	R1/U	170	J5/J	ND(470)	R1/U
Benzo(k)fluoranthene	ug/kg	ND(410)	R1/U	ND(430)	R1/U	ND(470)	R1/U

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-1
Analytical Results for Organic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

Station Number:	IR07SS27	IR07SS28	IR07SS29
Sample Depth(feet):	0.00	0.00	0.00
Sample Number:	9049N239	9049N238	9049N237
Matrix:	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012072-03A	9012072-02A	9012072-01A

Test Method/Analyte Name	Units	value qual	value qual	value qual
CLP-SOC (cont.)				
Benzo(a)pyrene	ug/kg	ND(410) R1/U	ND(430) R1/U	ND(470) R1/U
Indeno(1,2,3-cd)pyrene	ug/kg	ND(410) R1/U	ND(430) R1/U	ND(470) R1/U
Dibenzo(a,h)anthracene	ug/kg	ND(410) R1/U	ND(430) R1/U	ND(470) R1/U
Benzo(ghi)perylene	ug/kg	ND(410) R1/U	ND(430) R1/U	ND(470) R1/U
CLP-PEST/PCB				
Aldrin	ug/kg	ND(37) R1/U	ND(37) R12/U	ND(41) R1/U
Dieldrin	ug/kg	ND(73) R1/U	ND(73) R12/U	ND(82) R1/U
4,4'-DDE	ug/kg	ND(73) R1/U	ND(73) R12/U	ND(82) R1/U
Endrin	ug/kg	ND(73) R1/U	ND(73) R12/U	ND(82) R1/U
4,4'-DDD	ug/kg	ND(73) R1/U	ND(73) R12/U	ND(82) R1/U
4,4'-DDT	ug/kg	ND(73) R1/U	ND(73) R12/U	ND(82) R1/U
Methoxychlor	ug/kg	ND(370) R1/U	ND(370) R12/U	ND(410) R1/U
Aroclor-1260	ug/kg	ND(730) R1/U	ND(730) R12/U	ND(820) R1/U
TPH DIESEL				
TPH-Diesel	mg/kg	ND(23) J5/U	ND(22) J5/U	ND(26) J5/U
TPH-Extractable Unknown Hydrocarbon	mg/kg	NA	NA	NA
TPH GAS				
TPH-Gasoline	mg/kg	ND(0.58) R1/U	ND(0.59) R1/U	ND(0.65) R1/U
OIL & GREASE				
Total Oil & Grease	mg/kg	13200 J5	750 J5	18900 J5

Notes: Units expressed as micrograms (ug) or milligrams (mg) of chemical per kilogram (kg) of soil.
 NA: Not Analyzed.
 ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Validation Assigned Qualifiers

- A: Data is acceptable based on a review of laboratory and field QC samples and holding times as discussed in the text.
- F: The presence of this compound is due to suspected field contamination.
- J3: Analytical results for this compound are qualified as estimated due to poor spike recoveries.
- J5: Analytical results for this compound are qualified as estimated due to holding time exceedances.
- J7: Analytical results for this compound are qualified as estimated due to linearity problems in the initial calibration.
- J8: Analytical results for this compound are qualified as estimated due to detection of the compound above the instrument calibration range.
- R1: Analytical results for this compound are qualified as rejected due to holding time exceedances.
- R2: Analytical results for this compound are qualified as rejected due to poor spike recoveries.
- U1: Compound is qualified as non-detected due to its occurrence in the laboratory blanks.
- U2: Compound is qualified as non-detected due to its occurrence in the field blanks.
- V: Sample has undergone full CLP validation.

Laboratory Assigned Qualifiers

- B: Compound is also detected in the laboratory method blank.
- #,b: Analytical results should not be considered reliable for this common lab contaminant.
- D: Compound is identified in an analysis at a secondary dilution factor.
- E: Concentration exceeds the calibration range of the GC/MS instrument for the specific analysis.
- G: Reporting limit raised due to matrix interference.
- J: Result is detected below the reporting limit or is an estimated concentration.
- j: All reporting limits for this sample raised due to matrix interferences.
- l: If 'l' is attached to a diesel result, then either the hydrocarbons present in this sample represent an unknown mixture at a concentration of less than 45 mg/kg, or the hydrocarbons present in this sample do not fit the diesel pattern, but are found in the diesel range. (Quantification was based upon diesel references.) If 'l' is attached to a gasoline result, then this sample contains late eluting hydrocarbons. Early gasoline peaks are below reporting limits.
- o: Reporting limit raised due to high level of analyte present in sample.

Laboratory Assigned Qualifiers (Continued...)

r: Reporting limit changed due to sample volume limitations.

U: Compound was analyzed but not detected.

X,Y: Specific flag used to properly define the results. Qualifier is fully described in the Sample Data Summary Package and the Case Narrative.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	1.75	3.75	6.25	10.25
Sample Number:	9132H774	9132H775	9132H776	9132H777
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210001SA	0597210002SA	0597210003SA	0597210004SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.21 A	ND(0.1) A	ND(0.1) A	0.31 A
CLP-FUAA					
Arsenic	mg/kg	3.9 A	1.4 A/B	3.7 A/B	2.6 A
Lead	mg/kg	37.3 A	6.3 A	NA	NA
Selenium	mg/kg	ND(0.62) J3	ND(0.59) J3	ND(0.6) J3	ND(0.6) J3/W
CLP-ICP					
Aluminum	mg/kg	12200 A	4520 A	11000 A	7790 A
Antimony	mg/kg	ND(3.4) U1J3/BN	ND(2.9) J3/N	ND(4.2) U1J3/BN	ND(3.7) U1J3/BN
Barium	mg/kg	128 A	51.2 A	71.9 A	61.9 A
Beryllium	mg/kg	0.68 A	0.13 A/B	0.41 A/B	0.4 A/B
Cadmium	mg/kg	ND(0.73) A	ND(0.7) A	ND(0.71) A	ND(0.71) A
Calcium	mg/kg	10700 J2/*E	1670 J2/*E	13100 J2/*E	5190 J2/*E
Chromium	mg/kg	80.3 J3/N	18 J3/N	78.7 J3/N	31.4 J3/N
Cobalt	mg/kg	14.3 A	6.8 A	18.6 A	7.5 A/B
Copper	mg/kg	30.3 A	13.2 A	20.8 A	20 A
Iron	mg/kg	23600 A	9410 A	20900 A	15600 A
Lead	mg/kg	NA	NA	43.4 A	93.1 A
Magnesium	mg/kg	10200 A	4700 A	15000 A	5700 A
Manganese	mg/kg	494 A	287 A	298 A	266 A
Nickel	mg/kg	93.6 J3/N	36.9 J3/N	199 J3/N	52 J3/N
Potassium	mg/kg	1330 A	541 A/B	1160 A	993 A/B
Silver	mg/kg	0.44 A/B	ND(0.35) A	0.39 A/B	0.62 A/B
Sodium	mg/kg	260 J3/B	67.2 J3/B	179 J3/B	137 J3/B
Vanadium	mg/kg	52 A/E	16.3 A/E	47.2 A/E	45.1 A/E
Zinc	mg/kg	47.4 A/E	20.7 A/E	57.8 A/E	68.9 A/E
Molybdenum	mg/kg	ND(1.6) U1/B	ND(0.67) U1/B	ND(1.1) U1/B	ND(1.4) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.7 A	8.1 A	8.1 A	7.9 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B001	IR07B001	IR07B001	IR07B001
Sample Depth(feet):	16.25	20.75	26.25	31.25
Sample Number:	9132H778	9132H779	9132H780	9132H781
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210005SA	0597210006SA	0597210007SA	0597210015SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.12) A	0.39 A	ND(0.13) A	ND(0.13) A
CLP-FUAA					
Arsenic	mg/kg	2.8 A	12.4 A/B	13.4 A	8.1 A/+
Lead	mg/kg	NA	NA	3.9 A	4.6 A
Selenium	mg/kg	ND(0.68) J3	ND(0.77) J3	ND(0.75) J3	ND(0.75) J3
CLP-ICP					
Aluminum	mg/kg	11700 A	13300 A	13400 A	11400 A
Antimony	mg/kg	ND(8.8) U1J3/BN	ND(3.8) J3/N	ND(4.5) U1J3/BN	ND(3.7) J3/N
Barium	mg/kg	244 A	49.9 A/B	23.8 A/B	20.9 A/B
Beryllium	mg/kg	0.75 A/B	0.51 A/B	0.5 A/B	0.5 A/B
Cadmium	mg/kg	ND(0.81) A	ND(0.9) A	ND(0.88) A	ND(0.88) A
Calcium	mg/kg	24000 J2/*E	16700 J2/*E	4770 J2/*E	3700 J2/*E
Chromium	mg/kg	126 J3/N	109 J3/N	84 J3/N	83.6 J3/N
Cobalt	mg/kg	19.5 A	15 A	13.1 A	9.8 A/B
Copper	mg/kg	86.4 A	40.5 A	14.3 A	14.6 A
Iron	mg/kg	26800 A	23300 A	20700 A	19500 A
Lead	mg/kg	2480 A	45.8 A	NA	NA
Magnesium	mg/kg	16400 A	13800 A	10500 A	11100 A
Manganese	mg/kg	1400 A	193 A	175 A	167 A
Nickel	mg/kg	179 J3/N	165 J3/N	94.9 J3/N	89.1 J3/N
Potassium	mg/kg	2320 A	1890 A	2210 A	1950 A
Silver	mg/kg	0.61 A/B	ND(0.45) A	ND(0.44) A	0.44 A/B
Sodium	mg/kg	452 J3/B	1760 J3	471 J3/B	241 J3/B
Vanadium	mg/kg	46.5 A/E	52.6 A/E	45.7 A/E	40.3 A/E
Zinc	mg/kg	118 A/E	65.4 A/E	35.3 A/E	34.2 A/E
Molybdenum	mg/kg	ND(2.5) U1/B	ND(2.2) U1/B	ND(3) U1/B	ND(2.2) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.9 A	8.6 A	8.7 A	8.6 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B002	IR07B002
Sample Depth(feet):	1.25	3.25	5.75	10.75
Sample Number:	9049P100	9049P101	9049P102	9049P103
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012069-06B	9012069-07B	9012069-08B	9012069-09B

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.26	J5	0.26	J5	0.29	J5	ND(0.1)	J5/U
CLP-FUAA									
Arsenic	mg/kg	2.2	A/W	2.9	A/W	1.9	A	2.9	A
Lead	mg/kg	NA		NA		NA		NA	
Selenium	mg/kg	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU
CLP-ICP									
Aluminum	mg/kg	8751	A	5269	A	8910	A	9199	A
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U
Barium	mg/kg	51.4	A	57.5	A	107	A	191	A
Beryllium	mg/kg	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U
Cadmium	mg/kg	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U
Calcium	mg/kg	4200	J2/*	9184	J2/*	3034	J2/*	4245	J2/*
Chromium	mg/kg	48.1	J2/*	26.8	J2/*	23.2	J2/*	32.7	J2/*
Cobalt	mg/kg	5.9	A/*	6.4	A/*	10.9	A/*	8.8	A/*
Copper	mg/kg	11	A	18	A	50.7	A	16.1	A
Iron	mg/kg	16000	A	10600	A	15400	A	17200	A
Lead	mg/kg	18.6	A/*	53.5	A/*	43.8	A/*	73.5	A/*
Magnesium	mg/kg	2886	J2/*	6566	J2/*	4314	J2/*	4210	J2/*
Manganese	mg/kg	206	A/*	218	A/*	532	A/*	438	A/*
Nickel	mg/kg	30.2	J23/N*	45.4	J23/N*	39.2	J23/N*	40.1	J23/N*
Potassium	mg/kg	665	A	826	A	1480	A	2431	A
Silver	mg/kg	ND(1)	J3/*U	ND(1)	J3/*U	ND(1)	J3/*U	ND(1)	J3/*U
Sodium	mg/kg	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U
Vanadium	mg/kg	42.9	A	20.9	A	25.6	A	29.7	A
Zinc	mg/kg	36.3	A	55.1	A	59.6	A	85.5	A
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	140	A	ND(50)	A
EPA-9045	pH	7.2	J5	7.95	J5	8.15	J5	7.9	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B002	IR07B002	IR07B003	IR07B003
Sample Depth(feet):	15.75	20.75	1.75	3.75
Sample Number:	9049P104	9049P105	9132H802	9132H803
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	08/07/91	08/07/91
Lab Sample Number:	9012069-10B	9012070-01B	0597500009SA	0597500010SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	0.42 A/N	0.57 A/N
CLP-FUAA					
Arsenic	mg/kg	1.3 A/W	2 A	3.3 J3/N	5.2 J3/N
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/U	ND(0.63) A	ND(0.64) A
CLP-ICP					
Aluminum	mg/kg	13200 A	7260 J2/*	9280 A	14200 A
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(3.1) U1J3/NB	ND(5.5) U1J3/NB
Barium	mg/kg	81.8 A	27.6 A/*	304 A	486 A
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	0.74 A/B	1 A/B
Cadmium	mg/kg	5.2 A	ND(0.5) A/U	ND(0.74) A	1.9 A
Calcium	mg/kg	9497 J2/*	9520 J2/*	7890 A/E	4910 A/E
Chromium	mg/kg	15.6 J2/*	176 A/*	49.9 A/*	36.8 A/*
Cobalt	mg/kg	14.1 A/*	71.5 A	9.6 A/B	19 A
Copper	mg/kg	14.5 A	15.5 A/*	15.1 A	68.6 A
Iron	mg/kg	18000 A	27600 A/*	17700 A	39200 A
Lead	mg/kg	19.6 A/*	10.4 J2/*	194 A	379 A
Magnesium	mg/kg	5652 J2/*	80900 A/*	3610 A	4740 A
Manganese	mg/kg	271 A/*	528 J2/*	314 A	982 A
Nickel	mg/kg	45.9 J23/N*	1230 J3	29.3 A	44 A
Potassium	mg/kg	2687 A	ND(500) A/U	784 A/B	3550 A
Silver	mg/kg	ND(1) J3/*U	ND(1) J3/U	ND(0.37) A	0.88 A/B
Sodium	mg/kg	ND(500) A/U	ND(500) A/U	212 A/B	218 A/B
Vanadium	mg/kg	30.3 A	38.5 A/*	49.6 A/E	40 A/E
Zinc	mg/kg	65.4 A	51.7 A	348 A/E	660 A/E
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(0.71) A	ND(3.1) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.9 J5	7.2 J5	7.6 J5	7 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B003	IR07B003	IR07B003	IR07B004
Sample Depth(feet):	6.25	16.75	21.25	2.25
Sample Number:	9132H804	9132H805	9132H806	9133M152
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/08/91	08/13/91
Lab Sample Number:	0597500011SA	0597500012SA	0597500013SA	0598870009SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.35 A/N	0.13 A/N	0.19 A/N	ND(0.12) J3/N
CLP-FUAA					
Arsenic	mg/kg	4.2 J3/N	5.5 J3/NS	0.96 J3/N	2.1 A/B
Lead	mg/kg	NA	NA	6.7 A/S	3.9 A
Selenium	mg/kg	ND(0.63) A/W	ND(0.69) A/W	ND(0.71) A	ND(0.67) A/W
CLP-ICP					
Aluminum	mg/kg	12100 A	12900 A	5040 A	17800 A
Antimony	mg/kg	ND(5.3) U1J3/NB	ND(5.8) U1J3/NB	ND(3.5) J3/N	ND(4.6) U1J3/NB
Barium	mg/kg	228 A	87 A	35.4 A/B	100 A
Beryllium	mg/kg	0.79 A/B	0.81 A/B	0.35 A/B	0.98 A/B
Cadmium	mg/kg	ND(0.74) A	ND(0.81) A	ND(0.84) A	ND(0.79) A
Calcium	mg/kg	16200 A/E	13100 A/E	4410 A/E	5010 A/E
Chromium	mg/kg	61.9 A/*	56.3 A/*	370 A/*	185 A
Cobalt	mg/kg	13.1 A	16.6 A	85.3 A	26 A/E
Copper	mg/kg	258 A	34.2 A	11.7 A	14.9 A
Iron	mg/kg	22700 A	26700 A	43300 A	38400 A
Lead	mg/kg	363 A	51.1 A	NA	NA
Magnesium	mg/kg	9570 A	11400 A	149000 A	7630 A
Manganese	mg/kg	560 A	482 A	644 A	821 A
Nickel	mg/kg	68.7 A	78 A	2020 A	221 A
Potassium	mg/kg	1670 A	2260 A/B	912 A/B	1120 A/B
Silver	mg/kg	0.45 A/B	ND(0.4) A	ND(0.42) A	ND(0.39) A
Sodium	mg/kg	226 A/B	168 A/B	291 A/B	330 A/B
Vanadium	mg/kg	46.1 A/E	35.8 A/E	25.1 A/E	104 A/E
Zinc	mg/kg	247 A/E	101 A/E	51.1 A/E	39.8 A
Molybdenum	mg/kg	ND(0.71) A	ND(0.77) A	ND(0.9) U1/B	ND(3) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.2 J5	8.4 J5	8.5 J5	8.1 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B004	IR07B004	IR07B004	IR07B004
Sample Depth(feet):	4.25	6.25	11.25	22.75
Sample Number:	9133M153	9133M154	9133M155	9133M156
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870010SA	0598870011SA	0598870012SA	0598870013SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.11) J3/N	ND(0.13) J3/N	ND(0.13) J3/N	ND(0.13) J3/N
CLP-FUAA					
Arsenic	mg/kg	5.8 A	1.2 A/B	0.73 A/WB	7.7 A/S
Lead	mg/kg	5.7 A/S	8.2 A	2.5 A	10.7 A
Selenium	mg/kg	ND(0.66) A	ND(0.73) A/W	ND(0.75) A/W	ND(0.74) A/W
CLP-ICP					
Aluminum	mg/kg	18700 A	12500 A	2920 A	13700 A
Antimony	mg/kg	ND(7.6) U1J3/NB	ND(3.6) R2/N	ND(3.7) R2/N	ND(7.5) U1J3/NB
Barium	mg/kg	119 A	36.1 A/B	283 A	29.9 A/B
Beryllium	mg/kg	0.79 A/B	ND(0.53) U1/B	ND(0.54) U1/B	ND(0.53) U1/B
Cadmium	mg/kg	ND(0.77) A	ND(0.86) A	ND(0.89) A	ND(0.87) A
Calcium	mg/kg	6310 A/E	6500 A/E	837 A/EB	14100 A/E
Chromium	mg/kg	63.6 A	533 A	98.6 A	75 A
Cobalt	mg/kg	18.3 A/E	107 A/E	87.8 A/E	14.5 A/E
Copper	mg/kg	43 A	11.6 A	40.1 A	16.6 A
Iron	mg/kg	33100 A	49900 A	37700 A	24000 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	13100 A	112000 A	92900 A	11500 A
Manganese	mg/kg	503 A	896 A	1770 A	228 A
Nickel	mg/kg	85.5 A	2340 A	1760 A	102 A
Potassium	mg/kg	3510 A	354 A/B	545 A/B	2380 A
Silver	mg/kg	ND(0.38) A	ND(0.43) A	0.47 A/B	ND(0.43) A
Sodium	mg/kg	916 A/B	2140 A	900 A/B	1780 A
Vanadium	mg/kg	52.1 A/E	48.6 A/E	20 A/E	45.8 A/E
Zinc	mg/kg	77 A	39.8 A	42 A	45.8 A
Molybdenum	mg/kg	ND(3.2) U1/B	ND(2) U1/B	ND(2.6) U1/B	ND(2.6) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	9.1 J5	8.4 J5	8.4 J5	8.9 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B005	IR07B005	IR07B005	IR07B005
Sample Depth(feet):	1.75	3.75	6.25	11.25
Sample Number:	9132H782	9132H783	9132H784	9132H785
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	08/06/91
Lab Sample Number:	0597210008SA	0597210009SA	0597210010SA	0597210011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.24 A	ND(0.11) A	0.38 A	1.9 A
CLP-FUAA					
Arsenic	mg/kg	ND(5.6) A/W	20.7 A	20.9 A	5.1 A/B
Lead	mg/kg	48.6 A	19.6 A	NA	NA
Selenium	mg/kg	ND(0.65) J3	0.65 J3/BW	ND(0.66) J3	ND(0.68) J3
CLP-ICP					
Aluminum	mg/kg	16200 A	18700 A	14600 A	11200 A
Antimony	mg/kg	ND(3.2) J3/N	ND(6.4) U1J3/BN	ND(3.3) J3/N	ND(4.7) U1J3/BN
Barium	mg/kg	118 A	94.3 A	383 A	241 A
Beryllium	mg/kg	0.72 A/B	0.71 A/B	0.73 A/B	0.75 A/B
Cadmium	mg/kg	ND(0.77) A	ND(0.76) A	ND(0.78) A	0.95 A/B
Calcium	mg/kg	15100 J2/*E	5580 J2/*E	6120 J2/*E	13100 J2/*E
Chromium	mg/kg	360 J3/N	39.2 J3/N	54.4 J3/N	69.7 J3/N
Cobalt	mg/kg	62.8 A	25 A	12.7 A	11.7 A
Copper	mg/kg	66.4 A	60.5 A	62 A	174 A
Iron	mg/kg	41900 A	39800 A	22100 A	22400 A
Lead	mg/kg	NA	NA	885 A	857 A
Magnesium	mg/kg	99900 A	13500 A	4430 A	3760 A
Manganese	mg/kg	1010 A	573 A	457 A	512 A
Nickel	mg/kg	958 J3/N	65.9 J3/N	53.5 J3/N	39.8 J3/N
Potassium	mg/kg	1540 A	2630 A	3260 A	1420 A
Silver	mg/kg	0.53 A/B	0.49 A/B	0.55 A/B	2.1 A/B
Sodium	mg/kg	908 J3/B	395 J3/B	286 J3/B	342 J3/B
Vanadium	mg/kg	59.1 A/E	50.7 A/E	49.3 A/E	49.8 A/E
Zinc	mg/kg	89.1 A/E	88.2 A/E	281 A/E	436 A/E
Molybdenum	mg/kg	ND(2.4) U1/B	ND(3.5) U1/B	ND(2.1) U1/B	ND(2.1) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.8 A	7.2 A	7.8 A	8.1 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B005	IR07B005	IR07B005	IR07B006
Sample Depth(feet):	16.25	21.25	31.75	1.25
Sample Number:	9132H786	9132H787	9132H788	9049P106
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/06/91	08/06/91	08/06/91	12/07/90
Lab Sample Number:	0597210012SA	0597210013SA	0597210014SA	9012070-02B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.22 A	ND(0.12) A	ND(0.16) A	0.11 J5
CLP-FUAA					
Arsenic	mg/kg	2.9 A	ND(0.62) A	8.2 A/+	2 A/W
Lead	mg/kg	NA	4.8 A	10.1 A	NA
Selenium	mg/kg	ND(0.81) J3	ND(0.72) J3	ND(0.93) J3/W	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	13100 A	3770 A	28200 A	11600 J2/*
Antimony	mg/kg	ND(4) J3/N	ND(3.6) J3/N	ND(4.6) J3/N	ND(6) A/U
Barium	mg/kg	120 A	8.8 A/B	44.2 A/B	63.7 A/*
Beryllium	mg/kg	0.54 A/B	0.32 A/B	1 A/B	ND(0.5) A/U
Cadmium	mg/kg	ND(0.95) A	ND(0.85) A	ND(1.1) A	ND(0.5) A/U
Calcium	mg/kg	7150 J2/*E	3650 J2/*E	5460 J2/*E	7580 J2/*
Chromium	mg/kg	652 J3/N	699 J3/N	102 J3/N	230 A/*
Cobalt	mg/kg	150 A	94.7 A	22.9 A	36.1 A
Copper	mg/kg	30.3 A	14.2 A	38.3 A	43.9 A/*
Iron	mg/kg	72700 A	51400 A	42000 A	33800 A/*
Lead	mg/kg	208 A	NA	NA	37.5 J2/*
Magnesium	mg/kg	54300 A	210000 A	20200 A	107100 A/*
Manganese	mg/kg	831 A	888 A	414 A	739 J2/*
Nickel	mg/kg	2570 J3/N	2050 J3/N	149 J3/N	627 J3
Potassium	mg/kg	1700 A	ND(151) U1/B	4920 A	979 A
Silver	mg/kg	0.8 A/B	ND(0.42) A	ND(0.54) A	ND(1) J3/U
Sodium	mg/kg	595 J3/B	276 J3/B	6110 J3	ND(500) A/U
Vanadium	mg/kg	53.9 A/E	27.1 A/E	73.8 A/E	44.3 A/*
Zinc	mg/kg	193 A/E	37.4 A/E	86.6 A/E	99.8 A
Molybdenum	mg/kg	ND(1.8) U1/B	ND(1.9) U1/B	ND(5) U1/B	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) J3
EPA-9045	pH	8.1 A	8 A	8.4 A	8.1 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B006	IR07B006	IR07B006	IR07B006
Sample Depth(feet):	4.25	6.25	10.75	15.75
Sample Number:	9049P107	9049P108	9049P109	9049P110
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012070-03B	9012070-04B	9012070-05B	9012070-06B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	ND(1) A/U	ND(1) A/U	ND(1) A/U	ND(1) A/U
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/U	ND(0.5) A/U
CLP-ICP					
Aluminum	mg/kg	2680 J2/*	269 J2/O*	3250 J2/*	3400 J2/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	135 A/*	153 A/*	34.3 A/*	14.1 A/*
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Calcium	mg/kg	3300 J2/*	3190 J2/*	2720 J2/*	1610 J2/*
Chromium	mg/kg	575 A/*	643 A/*	602 A/*	774 A/*
Cobalt	mg/kg	64.2 A	70.2 A	98.3 A	95.1 A
Copper	mg/kg	14.5 A/*	14.6 A/*	35.6 A/*	14.4 A/*
Iron	mg/kg	32900 A/*	33600 A/*	56300 A/*	56100 A/*
Lead	mg/kg	365 J2/*	370 J2/*	77 J2/*	28 J2/*
Magnesium	mg/kg	204800 A/*	211200 A/*	175700 A/*	190700 A/*
Manganese	mg/kg	609 J2/*	570 J2/*	925 J2/*	644 J2/*
Nickel	mg/kg	1230 J3	1340 J3	2100 J3	2170 J3
Potassium	mg/kg	ND(500) A/U	ND(500) A/U	519 A	739 A
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	ND(500) A/U	ND(500) A/U	627 A	3800 A
Vanadium	mg/kg	20.6 A/*	20.9 A/*	28.4 A/*	30.2 A/*
Zinc	mg/kg	210 A	206 A	73.6 A	55.2 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	140 A	410 A	ND(50) A
EPA-9045					
pH	pH	8.4 J5	8.5 J5	8.3 J5	7.8 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B006	IR07B006	IR07B007	IR07B007
Sample Depth(feet):	20.25	30.75	1.75	3.75
Sample Number:	9049P111	9049P112	9049H566	9049H567
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/06/90	12/06/90
Lab Sample Number:	9012070-07B	9012070-08B	9012059-09B	9012059-10B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	3.9 A	6.6 A	1.5 A/+	ND(1) A/WU
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	14200 J2/*	16800 J2/*	4420 J2/*	915 J2/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	283 A/*	32 A/*	36.1 A/*	ND(20) A/*U
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) J3/NU	ND(0.5) J3/NU
Cadmium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	3.6 A/*	3.1 A/*
Calcium	mg/kg	2300 J2/*	4110 J2/*	1880 A/*	564 A/*
Chromium	mg/kg	121 A/*	66.8 A/*	143 A/*	182 A/*
Cobalt	mg/kg	25.5 A	13.2 A	36.9 A/*	67.5 A/*
Copper	mg/kg	27.8 A/*	29.2 A/*	10.8 A/*	ND(2.5) A/*U
Iron	mg/kg	32800 A/*	33300 A/*	23500 J2/*	18100 J2/*
Lead	mg/kg	31.1 J2/*	12.5 J2/*	11.8 J2/*	ND(10) J2/U
Magnesium	mg/kg	36200 A/*	13000 A/*	84400 J2/*	111000 J2/*
Manganese	mg/kg	370 J2/*	299 J2/*	363 J2/*	314 J2/*
Nickel	mg/kg	422 J3	74.2 J3	637 J2/*	1420 J2/*
Potassium	mg/kg	1930 A	3960 A	ND(500) A/U	ND(500) A/U
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	3460 A	6730 A	ND(500) A/U	ND(500) A/U
Vanadium	mg/kg	36.5 A/*	55.2 A/*	24 A/*	11.1 A/*
Zinc	mg/kg	77.1 A	83.8 A	31.7 J2/*	19.6 J2/*
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	NA	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8 J5	8.6 J5	7.8 J5	8.8 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B007	IR07B007	IR07B007	IR07B007
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9049H568	9049H569	9049H570	9049H571
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012059-11B	9012059-12B	9012059-13B	9012059-14B

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.15	J5	ND(0.1)	J5/U	ND(0.1)	J5/U	ND(0.1)	J5/U
CLP-FUAA									
Arsenic	mg/kg	ND(1)	A/WU	2.8	A/+	1.1	A/W	ND(1)	A/WU
Lead	mg/kg	NA		NA		NA		NA	
Selenium	mg/kg	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU
CLP-ICP									
Aluminum	mg/kg	2470	J2/*	10700	J2/*	4120	J2/*	5880	J2/*
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U
Barium	mg/kg	21.2	A/*	280	A/*	51.3	A/*	79.3	A/*
Beryllium	mg/kg	ND(0.5)	J3/NU	ND(0.5)	J3/NU	ND(0.5)	J3/NU	ND(0.5)	J3/NU
Cadmium	mg/kg	4.2	A/*	4	A/*	1.8	A/*	1.7	A/*
Calcium	mg/kg	2310	A/*	2500	A/*	1260	A/*	1000	A/*
Chromium	mg/kg	457	A/*	42.5	A/*	189	A/*	41.4	A/*
Cobalt	mg/kg	55.6	A/*	16.7	A/*	16.6	A/*	5.8	A/*
Copper	mg/kg	8.8	A/*	22.9	A/*	7.9	A/*	5.1	A/*
Iron	mg/kg	23800	J2/*	24200	J2/*	10600	J2/*	8910	J2/*
Lead	mg/kg	23.4	J2/*	15.7	J2/*	35.2	J2/*	15	J2/*
Magnesium	mg/kg	122000	J2/*	12600	J2/*	37900	J2/*	2260	J2/*
Manganese	mg/kg	433	J2/*	470	J2/*	257	J2/*	202	J2/*
Nickel	mg/kg	1040	J2/*	126	J2/*	400	J2/*	31	J2/*
Potassium	mg/kg	ND(500)	A/U	1010	A	ND(500)	A/U	ND(500)	A/U
Silver	mg/kg	ND(1)	J3/U	ND(1)	J3/U	ND(1)	J3/U	ND(1)	J3/U
Sodium	mg/kg	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U	842	A
Vanadium	mg/kg	17.8	A/*	21.9	A/*	19.1	A/*	26.2	A/*
Zinc	mg/kg	33.8	J2/*	62.2	J2/*	29.4	J2/*	21.6	J2/*
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	R2
EPA-9045									
pH	pH	7.25	J5	7.5	J5	7.8	J5	8.4	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B008	IR07B008	IR07B008	IR07B008
Sample Depth(feet):	2.25	3.75	6.25	11.25
Sample Number:	9133M134	9133M135	9133M136	9133M137
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598840019SA	0598840020SA	0598870001SA	0598870002SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.11) A	ND(0.11) A	ND(0.12) J3/N	ND(0.12) J3/N
CLP-FUAA					
Arsenic	mg/kg	3.7 J3/N	5 J3/NS	3.7 A	2 A/B
Lead	mg/kg	4.8 A	4.4 A	5.8 A	2.7 A
Selenium	mg/kg	ND(0.65) J3/N	ND(0.65) J3/N	ND(0.68) A	ND(0.69) A
CLP-ICP					
Aluminum	mg/kg	17200 A	17400 A	22300 A	15100 A
Antimony	mg/kg	ND(7) U1/B	ND(4.1) U1	ND(8.5) U1J3/NB	ND(5.1) U1J3/NB
Barium	mg/kg	90.4 A	84.6 A	105 A	61.5 A
Beryllium	mg/kg	0.79 A/B	0.79 A	0.83 A/B	0.84 A/B
Cadmium	mg/kg	ND(0.76) A	0.78 A	1.2 A/B	ND(0.82) A
Calcium	mg/kg	4110 A/E	3940 A/E	6800 A/E	5370 A/E
Chromium	mg/kg	107 A	117 A	135 A	144 A
Cobalt	mg/kg	22.7 A	18.3 A	24 A/E	22 A/E
Copper	mg/kg	12.4 A/E	15.5 A/E	20.8 A	15.4 A
Iron	mg/kg	27400 A	30900 A	35500 A	32800 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	4060 A	5880 A	13800 A	8180 A
Manganese	mg/kg	715 A	517 A	604 A	446 A
Nickel	mg/kg	90.5 A	118 A	168 A	499 A
Potassium	mg/kg	928 J3/B	1030 J3	1490 A	1020 A/B
Silver	mg/kg	ND(0.38) A	ND(0.38) A	0.51 A/B	ND(0.4) A
Sodium	mg/kg	194 A/B	278 A	340 A/B	399 A/B
Vanadium	mg/kg	72.6 A/E	75.7 A/E	89 A/E	71.9 A/E
Zinc	mg/kg	33.6 A	38.4 A	42.4 A	37.4 A
Molybdenum	mg/kg	ND(2.7) U1/B	ND(2.3) U1	ND(3.7) U1/B	ND(2.3) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	6.4 A	7.1 A	8.3 A	7.8 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B008	IR07B009	IR07B009	IR07B009
Sample Depth(feet):	16.25	1.75	3.75	5.25
Sample Number:	9133M138	9049H551	9049H552	9049H553
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	12/04/90	12/04/90	12/04/90
Lab Sample Number:	0598870003SA	9012040-08B	9012040-09B	9012041-01C

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.15) J3/N	0.39 J5	0.19 J5	0.12 J5
CLP-FUAA					
Arsenic	mg/kg	ND(0.74) A/W	3 A	3.2 A	ND(1) A/WU
Lead	mg/kg	5.7 A	NA	NA	NA
Selenium	mg/kg	ND(0.86) A/W	ND(0.5) J3/WU	ND(0.5) J3/NWU	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	49200 A	6500 A	7300 A	10900 A/*
Antimony	mg/kg	ND(11.3) U1J3/NB	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	57.6 A/B	74.7 A	56.1 A	87.3 A
Beryllium	mg/kg	1 A/B	ND(0.5) J3/U	ND(0.5) J3/NU	ND(0.5) A/U
Cadmium	mg/kg	ND(1) A	3.1 J3	2.7 J3/N	3.6 J3
Calcium	mg/kg	11300 A/E	1900 A	2200 A	4200 A
Chromium	mg/kg	433 A	164 J3	72.6 J3/N	115 A
Cobalt	mg/kg	39 A/E	20.6 A	11.2 A/*	20.2 J3/N
Copper	mg/kg	45 A	17.8 J3	18.4 J3	39.1 A/N*
Iron	mg/kg	53300 A	17100 A	16800 A	23400 A
Lead	mg/kg	NA	ND(10) J23/U	23.8 J23/N*	20.9 J3
Magnesium	mg/kg	139000 A	24800 A	3000 A/*	12800 A
Manganese	mg/kg	693 A	369 J3	264 J3	355 A/N
Nickel	mg/kg	897 A	381 J23	67.7 J23/N*	206 A/N
Potassium	mg/kg	488 A/B	ND(500) A/U	604 A	630 A
Silver	mg/kg	ND(0.5) A	ND(1) J53/U	ND(5.3) U1J35/*	ND(1) A/U
Sodium	mg/kg	950 A/B	ND(500) A/U	ND(500) A/U	ND(500) A/U
Vanadium	mg/kg	79.1 A/E	35.3 J3	38.9 J3/N	41.1 A
Zinc	mg/kg	75.3 A	49 J3	514 J3	100 A/W
Molybdenum	mg/kg	ND(4.6) U1/B	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	NA
EPA-9045	pH	8 A	7.95 J5	7.7 J5	7.05 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B010	IR07B010	IR07B010	IR07B010
Sample Depth(feet):	1.38	7.62	10.88	15.88
Sample Number:	9049H545	9049H546	9049H547	9049H548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012040-02B	9012040-03B	9012040-04B	9012040-05B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	1.8 J5	0.78 J5	0.2 J5
CLP-FUAA					
Arsenic	mg/kg	2.6 A	6.6 A	5.5 A	8 A
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) J3/WU	ND(0.5) J3/WU	ND(0.5) J3/WU	ND(0.5) J3/WU
CLP-ICP					
Aluminum	mg/kg	11500 A	8900 A	5400 A	13500 A
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	70.1 A	453 A	280 A	223 A
Beryllium	mg/kg	ND(0.5) J3/U	ND(0.5) J3/U	ND(0.5) J3/U	ND(0.5) J3/U
Cadmium	mg/kg	4.9 J3	5.8 J3	4.4 J3	4.3 J3
Calcium	mg/kg	2500 A	26900 A	17000 A	6300 A
Chromium	mg/kg	145 J3	35.9 J3	30 J3	26.7 J3
Cobalt	mg/kg	16.6 A	7.8 A	6.9 A	13.7 A
Copper	mg/kg	13.8 J3	208 J3	31.1 J3	26.3 J3
Iron	mg/kg	29900 A	32300 A	23800 A	23800 A
Lead	mg/kg	ND(10) J23/U	601 J23	459 J23	21.1 J23
Magnesium	mg/kg	8700 A	3400 A	2300 A	6000 A
Manganese	mg/kg	344 J3	308 J3	240 J3	441 J3
Nickel	mg/kg	184 J23	30.6 J23	24.4 J23	41.3 J23
Potassium	mg/kg	ND(500) A/U	965 A	1100 A	1300 A
Silver	mg/kg	ND(1.3) U1J35	ND(1) J53/U	ND(1) J53/U	ND(1) J53/U
Sodium	mg/kg	681 A	605 A	ND(500) A/U	767 A
Vanadium	mg/kg	66.4 J3	35.8 J3	24.3 J3	26.7 J3
Zinc	mg/kg	33.1 J3	736 J3	247 J3	74.7 J3
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.35 J5	8.2 J5	8.7 J5	9.25 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B010	IR07B010	IR07B011	IR07B011
Sample Depth(feet):	20.88	30.62	1.75	3.75
Sample Number:	9049H549	9049H550	9132H796	9132H797
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	08/07/91	08/07/91
Lab Sample Number:	9012040-06B	9012040-07B	0597500003SA	0597500004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.33	J5	0.12	J5	0.22	A/N	0.23	A/N
CLP-FUAA									
Arsenic	mg/kg	8.1	A	3.9	A	4.8	J3/NB	3.8	J3/NS
Lead	mg/kg	NA		NA		47.6	A	NA	
Selenium	mg/kg	ND(0.5)	J3/WU	ND(0.5)	J3/WU	ND(0.63)	A	ND(0.65)	A
CLP-ICP									
Aluminum	mg/kg	12100	A	5800	A	22200	A	11700	A
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(3.4)	U1J3/N	ND(3.2)	J3/N
Barium	mg/kg	166	A	ND(20)	A/U	351	A	89.7	A
Beryllium	mg/kg	ND(0.5)	J3/U	ND(0.5)	J3/U	1.1	A	0.66	A/B
Cadmium	mg/kg	3.1	J3	2.2	J3	ND(0.74)	A	ND(0.76)	A
Calcium	mg/kg	2900	A	2300	A	9970	A/E	7230	A/E
Chromium	mg/kg	26.4	J3	111	J3	288	A/*	455	A/*
Cobalt	mg/kg	10.8	A	7.5	A	39.3	A	50.3	A
Copper	mg/kg	28.5	J3	8	J3	106	A	243	A
Iron	mg/kg	19300	A	15100	A	38100	A	39300	A
Lead	mg/kg	71.2	J23	ND(10)	J23/U	NA		122	A
Magnesium	mg/kg	5500	A	10400	A	68100	A	104000	A
Manganese	mg/kg	435	J3	109	J3	623	A	679	A
Nickel	mg/kg	41	J23	85.6	J23	567	A	1030	A
Potassium	mg/kg	773	A	1200	A	2980	A	767	A/B
Silver	mg/kg	ND(1)	J53/U	ND(1)	J53/U	0.76	A/B	0.52	A/B
Sodium	mg/kg	1100	A	1600	A	248	A/B	974	A/B
Vanadium	mg/kg	26.1	J3	22.2	J3	60.8	A/E	43.2	A/E
Zinc	mg/kg	84.5	J3	27.3	J3	140	A/E	169	A/E
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(1.4)	U1/B	ND(2.6)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	R2	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	8.75	J5	8.8	J5	8.6	J5	8.3	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B011	IR07B011	IR07B011	IR07B011
Sample Depth(feet):	6.25	11.25	16.75	21.25
Sample Number:	9132H798	9132H799	9132H800	9132H801
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597500005SA	0597500006SA	0597500007SA	0597500008SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.23	A/N	ND(0.14)	A/N	0.14	A/N	ND(0.13)	A/N
CLP-FUAA									
Arsenic	mg/kg	2.3	J3/NS	6.2	J3/N+	0.92	J3/NB	1.6	J3/NB
Lead	mg/kg	63.9	A/S	4.9	A	18.4	A	NA	
Selenium	mg/kg	ND(0.65)	A	ND(0.79)	A	ND(0.76)	A	ND(0.78)	A
CLP-ICP									
Aluminum	mg/kg	12500	A	23500	A	15400	A	13400	A
Antimony	mg/kg	ND(3.5)	U1J3/NB	ND(5.5)	U1J3/NB	ND(3.7)	J3/N	ND(10.5)	U1J3/NB
Barium	mg/kg	195	A	86	A	89.3	A	82.2	A
Beryllium	mg/kg	0.86	A/B	1.1	A/B	0.75	A/B	0.7	A/B
Cadmium	mg/kg	ND(0.76)	A	ND(0.92)	A	ND(0.89)	A	ND(0.92)	A
Calcium	mg/kg	5820	A/E	10900	A/E	11500	A/E	12500	A/E
Chromium	mg/kg	564	A/*	480	A/*	519	A/*	502	A/*
Cobalt	mg/kg	72.7	A	66.7	A	83.9	A	95.4	A
Copper	mg/kg	121	A	25.5	A	25.5	A	39.4	A
Iron	mg/kg	43700	A	45700	A	48100	A	48700	A
Lead	mg/kg	NA		NA		NA		2480	A
Magnesium	mg/kg	111000	A	115000	A	133000	A	137000	A
Manganese	mg/kg	1180	A	775	A	853	A	815	A
Nickel	mg/kg	1230	A	1310	A	1560	A	1570	A
Potassium	mg/kg	876	A/B	875	A/B	604	A/B	949	A/B
Silver	mg/kg	0.59	A/B	0.79	A/B	0.45	A/B	1.1	A/B
Sodium	mg/kg	526	A/B	800	A/B	917	A/B	4470	A
Vanadium	mg/kg	51.1	A/E	68.2	A/E	56.4	A/E	50.5	A/E
Zinc	mg/kg	124	A/E	53.8	A/E	68.8	A/E	66.8	A/E
Molybdenum	mg/kg	ND(1.9)	U1/B	ND(1.1)	U1/B	ND(1.5)	U1/B	ND(1.2)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	NA		ND(50)	A
EPA-9045									
pH	pH	8.2	J5	8.1	J5	8.5	J5	8.5	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B012	IR07B012	IR07B012	IR07B012
Sample Depth(feet):	2.25	4.25	6.25	11.25
Sample Number:	9049H538	9049H539	9049H540	9049H541
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/03/90	12/03/90
Lab Sample Number:	69965	69966	69967	9012027-01C

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.26	J23/N*	0.8	J23/N*	0.1	J23/N*	0.19	J5
CLP-FUAA									
Arsenic	mg/kg	3.8	A/*	6.3	J5/*	ND(1.1)	A/S*	2.9	A
Lead	mg/kg	112	J23/N*	1520	J23/N*	12.3	J23/N*	NA	
Selenium	mg/kg	ND(1.1)	J3/NW	ND(1.3)	J3/NW	ND(1.1)	J3/NW	ND(0.5)	J3/WU
CLP-ICP									
Aluminum	mg/kg	10100	A/*	13200	A/*	11800	A/*	16600	A
Antimony	mg/kg	48	J3/N	72.1	J3/N	77.2	J3/N	ND(6)	A/U
Barium	mg/kg	85.6	A/*	216	A/*	111	A	89.5	A
Beryllium	mg/kg	0.48	A/B	0.68	A/B	0.21	A/B	ND(0.5)	J3/U
Cadmium	mg/kg	2.6	A	4.8	A	6.7	A	5	J3
Calcium	mg/kg	9010	J2/*	10300	J2/*	3060	J2/*	7660	A
Chromium	mg/kg	87.2	A/*	233	A/*	903	A/*	396	J3
Cobalt	mg/kg	16.8	A	43.5	A	85.2	A	37	A
Copper	mg/kg	31.7	A	74.3	A	80.9	A	29.1	J3
Iron	mg/kg	21400	A	35400	A	41100	A	35100	A
Lead	mg/kg	NA		NA		NA		ND(10)	J23/U
Magnesium	mg/kg	12700	J2/*	59300	J2/*	167000	J2/*	101000	A
Manganese	mg/kg	495	J2/*	614	J2/*	910	J2/*	620	J3
Nickel	mg/kg	140	J23/N*	694	J23/N*	1630	J23/N*	679	J23
Potassium	mg/kg	790	A/B	1080	A/B	152	A/B	637	A
Silver	mg/kg	1.2	A/B	2.4	A/B	2.9	A	ND(1.2)	U1J35
Sodium	mg/kg	434	A/B	548	A/B	897	A/B	1250	A
Vanadium	mg/kg	43.8	A	55	A	42.4	A	43.8	J3
Zinc	mg/kg	71.1	A	178	A	62.7	A	58	J3
Molybdenum	mg/kg	2.2	A	3.3	A	2.9	A	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	8.1	A	7.6	A	8.5	A	7	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B012	IR07B012	IR07B012	IR07B013
Sample Depth(feet):	16.25	23.25	30.88	1.75
Sample Number:	9049H542	9049H543	9049H544	9133M139
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/03/90	12/03/90	12/04/90	08/13/91
Lab Sample Number:	9012027-02B	9012027-03B	9012040-01B	0598870004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	ND(0.1)	J5/U	ND(0.1)	J5/U	ND(0.1)	J5/U	0.14	J3/N
CLP-FUAA									
Arsenic	mg/kg	2.6	A	2.5	A/S	1.2	A	1.7	A/B
Lead	mg/kg	NA		NA		NA		5.7	A
Selenium	mg/kg	ND(0.5)	J3/NU	ND(0.5)	J3/WU	ND(0.5)	J3/WU	ND(0.67)	A
CLP-ICP									
Aluminum	mg/kg	16800	A	10100	A	29800	A	20000	A
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U	ND(3.3)	R2/N
Barium	mg/kg	122	A	59.7	A	149	A	123	A
Beryllium	mg/kg	ND(0.5)	J3/U	ND(0.5)	J3/U	ND(0.5)	J3/U	0.8	A/B
Cadmium	mg/kg	4.5	J3	4.1	J3	7.3	J3	ND(0.78)	A
Calcium	mg/kg	9280	A	3810	A	13300	A	2890	A/E
Chromium	mg/kg	262	J3	395	J3	99.6	J3	209	A
Cobalt	mg/kg	36.8	A	44.4	A	37.4	A	42	A/E
Copper	mg/kg	50.9	J3	20.2	J3	47.2	J3	25	A
Iron	mg/kg	42900	A	29300	A	47800	A	35500	A
Lead	mg/kg	ND(10)	J23/U	ND(10)	J23/U	ND(10)	J23/U	NA	
Magnesium	mg/kg	101000	A	155000	A	41000	A	20500	A
Manganese	mg/kg	1210	J3	610	J3	1800	J3	489	A
Nickel	mg/kg	546	J23	854	J23	102	J23	849	A
Potassium	mg/kg	682	A	ND(500)	A/U	578	A	327	A/B
Silver	mg/kg	ND(1)	J53/U	ND(1)	J53/U	ND(1)	J53/U	ND(0.39)	A
Sodium	mg/kg	610	A	598	A	902	A	390	A/B
Vanadium	mg/kg	51.5	J3	32	J3	79.1	J3	56.3	A/E
Zinc	mg/kg	67.8	J3	31	J3	60.3	J3	53.1	A
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(2.6)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7.7	J5	8.2	J5	7	J5	8.4	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B013	IR07B013	IR07B013	IR07B013
Sample Depth(feet):	3.75	6.25	11.25	21.25
Sample Number:	9133M140	9133M141	9133M142	9133M143
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0598870005SA	0598870006SA	0598870007SA	0598870008SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.15	J3/N	ND(0.12)	J3/N	ND(0.13)	J3/N	ND(0.13)	J3/N
CLP-FUAA									
Arsenic	mg/kg	17.9	A/S	0.73	A/B	1.1	A/B	1.3	A/WB
Lead	mg/kg	NA		6.4	A/S	8.1	A	9.4	A
Selenium	mg/kg	ND(0.67)	A/W	ND(0.71)	A/W	ND(0.73)	A/W	ND(0.77)	A
CLP-ICP									
Aluminum	mg/kg	16000	A	3670	A	5750	A	7090	A
Antimony	mg/kg	ND(7.1)	U1J3/NB	ND(3.5)	R2/N	ND(3.6)	R2/N	ND(3.8)	R2/N
Barium	mg/kg	150	A	21.6	A/B	43.3	A/B	42.5	A/B
Beryllium	mg/kg	0.81	A/B	ND(0.34)	U1/B	ND(0.36)	U1/B	ND(0.37)	U1/B
Cadmium	mg/kg	ND(0.79)	A	ND(0.83)	A	ND(0.86)	A	ND(0.9)	A
Calcium	mg/kg	5170	A/E	1790	A/E	2560	A/E	12300	A/E
Chromium	mg/kg	265	A	370	A	445	A	375	A
Cobalt	mg/kg	33.2	A/E	124	A/E	129	A/E	94.8	A/E
Copper	mg/kg	90	A	7	A	18	A	15.9	A
Iron	mg/kg	34700	A	59300	A	58600	A	43500	A
Lead	mg/kg	72.6	A	NA		NA		NA	
Magnesium	mg/kg	38100	A	183000	A	115000	A	63800	A
Manganese	mg/kg	522	A	930	A	1110	A	647	A
Nickel	mg/kg	533	A	2660	A	2400	A	1500	A
Potassium	mg/kg	1940	A	ND(75.1)	A	396	A/B	560	A
Silver	mg/kg	0.51	A/B	ND(0.41)	A	0.63	A/B	ND(0.45)	A
Sodium	mg/kg	800	A/B	1270	A	569	A/B	638	A/B
Vanadium	mg/kg	62.2	A/E	25.1	A/E	35.1	A/E	36.9	A/E
Zinc	mg/kg	163	A	43.9	A	49.3	A	40.8	A
Molybdenum	mg/kg	ND(5.5)	U1	ND(1.1)	U1/B	ND(0.86)	U1/B	ND(1.1)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	NA	
EPA-9045									
pH	pH	8.1	A	8.2	A	8.1	A	9.8	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B014	IR07B014	IR07B014	IR07B014
Sample Depth(feet):	1.75	4.25	6.25	16.25
Sample Number:	9133H835	9133H836	9133H837	9133H838
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840001SA	0598840002SA	0598840003SA	0598840004SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.39 A	0.34 A	0.13 A	0.22 A
CLP-FUAA					
Arsenic	mg/kg	3.5 J3/N	3.2 J3/N	2 J3/BN	9.3 J3/N
Lead	mg/kg	NA	NA	9.8 A/S	8.1 A
Selenium	mg/kg	ND(0.65) J3/N	ND(0.65) J3/NW	ND(0.7) J3/N	ND(0.69) J3/N
CLP-ICP					
Aluminum	mg/kg	10600 A	11900 A	11100 A	21200 A
Antimony	mg/kg	ND(3.2) A	ND(5.1) U1/B	ND(3.4) A	ND(6.4) U1/B
Barium	mg/kg	95.6 A	122 A	88.3 A	1490 A
Beryllium	mg/kg	ND(0.47) U1/B	0.78 A/B	ND(0.51) U1/B	1.7 A
Cadmium	mg/kg	0.8 A/B	ND(0.76) A	ND(0.82) A	ND(0.81) A
Calcium	mg/kg	9620 A/E	13900 A/E	4030 A/E	10800 A/E
Chromium	mg/kg	319 A	269 A	560 A	283 A
Cobalt	mg/kg	33.7 A	43.9 A	76.2 A	45.8 A
Copper	mg/kg	50.7 A/E	209 A/E	54.1 A/E	182 A/E
Iron	mg/kg	30900 A	36000 A	43000 A	55300 A
Lead	mg/kg	901 A	102 A	NA	NA
Magnesium	mg/kg	68000 A	80800 A	146000 A	55900 A
Manganese	mg/kg	572 A	685 A	1020 A	8490 A
Nickel	mg/kg	765 A	802 A	1450 A	536 A
Potassium	mg/kg	1010 J3/B	1090 J3/B	767 J3/B	3170 J3
Silver	mg/kg	0.61 A/B	0.31 A/B	0.26 A/B	1.5 A/B
Sodium	mg/kg	613 A/B	1170 A	2610 A	797 A/B
Vanadium	mg/kg	45.7 A/E	48.2 A/E	44.9 A/E	113 A/E
Zinc	mg/kg	156 A	139 A	45 A	121 A
Molybdenum	mg/kg	ND(2.4) U1/B	ND(2.1) U1	ND(2.1) U1	ND(3.7) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.2 A	9.9 A	8 A	8.3 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B014	IR07B014	IR07B015	IR07B015
Sample Depth(feet):	21.75	31.25	1.75	3.75
Sample Number:	9133H839	9133H840	9132H807	9132H808
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/08/91	08/08/91
Lab Sample Number:	0598840005SA	0598840006SA	0597500014SA	0597500015SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.16	A	ND(0.12)	A	0.12	A/N	ND(0.11)	A/N
CLP-FUAA									
Arsenic	mg/kg	4.1	J3/N	2.8	J3/N	3.1	J3/N	3.9	J3/NS
Lead	mg/kg	9.3	A/S	4	A	92	A/S	17.1	A
Selenium	mg/kg	ND(0.68)	J3/N	ND(0.67)	J3/N	ND(0.65)	A	ND(0.65)	A/W
CLP-ICP									
Aluminum	mg/kg	19500	A	17000	A	13400	A	17400	A
Antimony	mg/kg	ND(7.5)	U1/B	ND(3.3)	A	ND(3.2)	J3/N	ND(5)	U1J3/NB
Barium	mg/kg	192	A	144	A	132	A	220	A
Beryllium	mg/kg	0.83	A/B	0.81	A/B	0.91	A/B	1.1	A/B
Cadmium	mg/kg	ND(0.8)	A	ND(0.79)	A	ND(0.77)	A	ND(0.76)	A
Calcium	mg/kg	9990	A/E	10900	A/E	11700	A/E	13000	A/E
Chromium	mg/kg	350	A	599	A	271	A/*	325	A/*
Cobalt	mg/kg	45.4	A	66.6	A	41	A	49.6	A
Copper	mg/kg	39.2	A/E	34.1	A/E	34.6	A	56.2	A
Iron	mg/kg	42400	A	43500	A	35600	A	51100	A
Lead	mg/kg	NA		NA		NA		NA	
Magnesium	mg/kg	74400	A	134000	A	74600	A	71300	A
Manganese	mg/kg	1030	A	1060	A	646	A	913	A
Nickel	mg/kg	747	A	1180	A	608	A	602	A
Potassium	mg/kg	971	J3/B	892	J3/B	1380	A	1820	A
Silver	mg/kg	0.21	A/B	0.42	A/B	0.43	A/B	0.55	A/B
Sodium	mg/kg	693	A/B	1610	A	977	A/B	1050	A/B
Vanadium	mg/kg	73.3	A/E	56.5	A/E	55.2	A/E	67.3	A/E
Zinc	mg/kg	61	A	47.9	A	72.2	A/E	64.2	A/E
Molybdenum	mg/kg	ND(3.7)	U1/B	ND(2.5)	U1/B	ND(1.4)	U1/B	ND(1.4)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7.9	A	8	A	8.5	J5	8.4	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B015	IR07B015	IR07B015	IR07B015
Sample Depth(feet):	6.75	11.25	16.75	21.25
Sample Number:	9132H809	9132H810	9132H811	9132H812
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0597500016SA	0597500017SA	0597500018SA	0597500019SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.11) A/N	ND(0.12) A/N	ND(0.11) A/N	0.2 A/N
CLP-FUAA					
Arsenic	mg/kg	2.7 J3/N	5.4 J3/NS	5.3 J3/NS	5.1 J3/NS
Lead	mg/kg	17.6 A	16.7 A/2	6.6 A	6.5 A
Selenium	mg/kg	ND(0.65) A/W	ND(0.69) A/W	ND(0.66) A/W	ND(0.68) A
CLP-ICP					
Aluminum	mg/kg	17500 A	17800 A	29900 A	21100 A
Antimony	mg/kg	ND(4.9) U1J3/NB	ND(4.7) U1J3/NB	ND(5.5) U1J3/NB	ND(4.3) U1J3/NB
Barium	mg/kg	163 A	119 A	223 A	147 A
Beryllium	mg/kg	1.1 A/B	0.92 A/B	1.5 A	1.1 A/B
Cadmium	mg/kg	ND(0.77) A	ND(0.81) A	ND(0.78) A	ND(0.8) A
Calcium	mg/kg	11100 A/E	7680 A/E	12600 A/E	7130 A/E
Chromium	mg/kg	357 A/*	359 A/*	312 A/*	361 A/*
Cobalt	mg/kg	49.4 A	48.8 A	44.8 A	46.4 A
Copper	mg/kg	76.4 A	43.4 A	46.2 A	40.5 A
Iron	mg/kg	44000 A	39700 A	42600 A	40200 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	84600 A	93600 A	74700 A	71900 A
Manganese	mg/kg	940 A	670 A	993 A	658 A
Nickel	mg/kg	731 A	648 A	586 A	713 A
Potassium	mg/kg	1740 A	1370 A	3120 A	1150 A/B
Silver	mg/kg	0.66 A/B	0.59 A/B	0.99 A/B	0.59 A/B
Sodium	mg/kg	1650 A	2990 A	1890 A	2250 A
Vanadium	mg/kg	63.2 A/E	55.6 A/E	73.9 A/E	63.6 A/E
Zinc	mg/kg	66.6 A/E	60.4 A/E	87.3 A/E	62 A/E
Molybdenum	mg/kg	ND(2.5) U1/B	ND(1.7) U1/B	ND(1.7) U1/B	ND(1.5) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.6 J5	8.5 J5	8.3 J5	8.3 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B015	IR07B016	IR07B016	IR07B016
Sample Depth(feet):	31.75	1.75	3.75	16.25
Sample Number:	9132H813	9132H823	9132H824	9132H825
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	0597500020SA	08094-09	08094-10	08094-11

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.12) A/N	ND(0.16) A/U	0.36 A	ND(0.15) A/U
CLP-FUAA					
Arsenic	mg/kg	9.4 J3/NS	4.73 A	4.5 A	3.97 A
Lead	mg/kg	10.8 A	238.2 A	NA	NA
Selenium	mg/kg	0.71 A/B	ND(0.61) A/UN	ND(0.6) A/UNW	ND(0.58) A/UNW
CLP-ICP					
Aluminum	mg/kg	22700 A	21200.9 A	14323.1 A	17163.2 A
Antimony	mg/kg	ND(4.4) U1J3/NB	ND(8.01) U1/BN	ND(3.39) U1/BN	ND(3.96) U1/BN
Barium	mg/kg	186 A	219.01 A	278.47 A	281.96 A
Beryllium	mg/kg	1.3 A	1.08 A/B	0.85 A/B	0.82 A/B
Cadmium	mg/kg	ND(0.84) A	ND(0.35) A/U	ND(0.35) A/U	ND(0.34) A/U
Calcium	mg/kg	9420 A/E	5671.72 A	4664.6 A	6312.54 A
Chromium	mg/kg	501 A/*	297.02 A	163.28 A	267.18 A
Cobalt	mg/kg	73.7 A	38.59 A	24.87 A	38.32 A
Copper	mg/kg	113 A	32.42 A	50.63 A	226.14 A
Iron	mg/kg	48300 A	39939 A	28056.2 A	33027.8 A
Lead	mg/kg	NA	NA	467.97 A	4544.38 A
Magnesium	mg/kg	117000 A	40525.5 A	25082.4 A	54443.9 A
Manganese	mg/kg	1320 A	1066.47 A	650.93 A	579.09 A
Nickel	mg/kg	1100 A	471.1 A	295.15 A	530.26 A
Potassium	mg/kg	1570 A	937.71 A/B	788.39 A/B	823.22 A/B
Silver	mg/kg	0.87 A/B	ND(0.78) A/UN	ND(0.77) A/UN	ND(0.74) A/UN
Sodium	mg/kg	907 A/B	271.42 A/B	374.11 A/B	208.1 A/B
Vanadium	mg/kg	75.4 A/E	70.8 A	60.53 A	58.09 A
Zinc	mg/kg	72.7 A/E	65.39 A	151.02 A	52.48 A
Molybdenum	mg/kg	ND(1.4) U1/B	ND(0.82) A/U	ND(0.81) A/U	ND(0.79) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045	pH	7.6 J5	7.9 A	7.8 A	8 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B016	IR07B017	IR07B017	IR07B017
Sample Depth(feet):	21.25	1.75	3.75	6.75
Sample Number:	9132H826	9132H827	9132H828	9132H829
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	08094-12	08094-13	08094-14	08094-15

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.17) A/U	ND(0.16) A/U	ND(0.16) A/U	ND(0.17) A/U
CLP-FUAA					
Arsenic	mg/kg	2.93 A	1.73 A/B	10.07 A/+	2.68 A/+
Lead	mg/kg	9.61 A/S	8.91 A/S	10.92 A	7.78 A/S
Selenium	mg/kg	ND(0.64) A/UNW	ND(0.6) A/UN	ND(0.6) A/UNW	ND(0.64) A/UNW
CLP-ICP					
Aluminum	mg/kg	22195.9 A	7539.81 A	19268 A	37298.1 A
Antimony	mg/kg	ND(4.35) U1/BN	ND(3.96) U1/BN	ND(4.33) U1/BN	ND(7.35) U1/BN
Barium	mg/kg	98.86 A	852.28 A	226.6 A	124.31 A
Beryllium	mg/kg	0.78 A/B	1.51 A	0.96 A/B	1.23 A
Cadmium	mg/kg	ND(0.37) A/U	ND(0.35) A/U	ND(0.34) A/U	ND(0.37) A/U
Calcium	mg/kg	5360.41 A	1198.76 A	5487.03 A	7268.29 A
Chromium	mg/kg	351.63 A	36.6 A	169.58 A	319.58 A
Cobalt	mg/kg	38.07 A	53.99 A	29.88 A	60.39 A
Copper	mg/kg	24.28 A	113.39 A	32.56 A	51.47 A
Iron	mg/kg	34977.6 A	39522 A	32383.8 A	46611.2 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	60230.9 A	4641.03 A	36219.3 A	67067.4 A
Manganese	mg/kg	523.08 A	5057.04 A	674.39 A	1216.23 A
Nickel	mg/kg	654.71 A	65.83 A	332 A	585.47 A
Potassium	mg/kg	619.94 A/B	1182.89 A	1624.58 A	863.11 A/B
Silver	mg/kg	ND(0.81) A/UN	ND(0.77) U1/BN	ND(0.76) A/UN	ND(0.81) A/UN
Sodium	mg/kg	311.25 A/B	195.12 A/B	166.3 A/B	176.61 A/B
Vanadium	mg/kg	48.48 A	89.98 A	47.79 A	72.78 A
Zinc	mg/kg	50.5 A	38.01 A	62.58 A	73.31 A
Molybdenum	mg/kg	ND(0.86) A/U	ND(0.81) A/U	ND(0.8) A/U	ND(0.86) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8 A	7.7 A	8 A	7.7 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B017	IR07B017	IR07B017	IR07B017
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9132H830	9132H831	9132H832	9132H833
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	08/09/91	08/09/91	08/09/91
Lab Sample Number:	08094-16	08095-01	08095-02	08095-03

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	ND(0.16)	A/U	ND(0.17)	J5/U	ND(0.17)	J5/U	0.47	J5
CLP-FUAA									
Arsenic	mg/kg	3.2	A	7.98	A/N	6.06	A/N	929.06	A/N
Lead	mg/kg	7.48	A/S	11.73	A	12.47	A	NA	
Selenium	mg/kg	ND(0.6)	A/UN	ND(0.63)	A/UNW	ND(0.63)	A/UNW	11.46	A/N
CLP-ICP									
Aluminum	mg/kg	13924.4	A	17884.8	A	25070.3	A	20604.8	A
Antimony	mg/kg	ND(6.5)	U1/BN	ND(3.2)	A/UN	ND(3.2)	A/UN	10.98	A/BN
Barium	mg/kg	95.63	A	178.47	A	80.92	A	701.63	A
Beryllium	mg/kg	0.82	A/B	0.99	A/B	0.85	A/B	1.03	A
Cadmium	mg/kg	ND(0.35)	A/U	ND(0.37)	A/U	ND(0.37)	A/U	0.75	A
Calcium	mg/kg	3444.9	A	3680.38	A	7105.4	A	4318.09	A
Chromium	mg/kg	308.28	A	198.86	A	253.22	A	218.89	A
Cobalt	mg/kg	41.45	A	26.72	A	34.4	A	45.09	A
Copper	mg/kg	16.21	A	42.9	A	33.6	A	2025.63	A
Iron	mg/kg	30873.2	A	37697.7	A	34862.5	A	44311.7	A
Lead	mg/kg	NA		NA		NA		217.03	A
Magnesium	mg/kg	19733.1	A	21933.7	A	47373.4	A	43032.6	A
Manganese	mg/kg	484.26	A	1217.05	A	758.46	A	560.69	A
Nickel	mg/kg	477.25	A	318.39	A	426.75	A	741.77	A
Potassium	mg/kg	606.55	A/B	721.2	A/B	702.02	A/B	690.08	A/B
Silver	mg/kg	ND(0.77)	A/UN	ND(0.8)	A/UN	ND(0.8)	A/UN	ND(2.09)	U1/BN
Sodium	mg/kg	138.68	A/B	219.67	A/B	161.84	A/B	841.07	A/B
Vanadium	mg/kg	56.57	A	73.94	A	61.82	A	67.06	A
Zinc	mg/kg	35.85	A	57.26	A	60.85	A	140.27	A
Molybdenum	mg/kg	ND(0.81)	A/U	ND(0.85)	A/UN	ND(0.85)	A/UN	ND(0.88)	A/UN
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7.8	A	7.4	A	7.9	A	7.6	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B017	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	40.75	1.25	2.75	5.25
Sample Number:	9132H834	9049G555	9049G556	9049G557
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/09/91	12/05/90	12/05/90	12/05/90
Lab Sample Number:	08095-04	9012058-01B	9012058-02B	9012058-03B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.17) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	11.96 A/N	ND(1) A/U	2.1 A	1 A
Lead	mg/kg	4.85 A/S	NA	NA	NA
Selenium	mg/kg	ND(0.65) A/UNW	ND(0.5) J3/NWU	ND(0.5) J3/WU	ND(0.5) J3/WU
CLP-ICP					
Aluminum	mg/kg	10048.4 A	550 A/*	2600 A/*	1700 A/*
Antimony	mg/kg	ND(3.3) A/UN	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	19.22 A/B	ND(20) A/U	92.1 A	ND(20) A/U
Beryllium	mg/kg	0.4 A	ND(0.5) J3/NU	ND(0.5) J3/U	ND(0.5) J3/U
Cadmium	mg/kg	ND(0.38) A/U	4.5 A	2.6 A	4.8 A
Calcium	mg/kg	8099.17 A	ND(500) A/U	1800 A	701 A
Chromium	mg/kg	815.27 A	88.1 A	33.4 A	78.7 A
Cobalt	mg/kg	82.21 A	76.4 J3/N	57.8 J3	77.1 J3
Copper	mg/kg	71.25 A	ND(2.5) A/U	25.8 A	3.8 A
Iron	mg/kg	46016.3 A	33300 A	21200 A	35700 A
Lead	mg/kg	NA	ND(10) J3/NU	ND(10) J3/U	ND(10) J3/U
Magnesium	mg/kg	115711 A	206000 A	121000 A	199000 A
Manganese	mg/kg	570 A	566 A	710 A	624 A
Nickel	mg/kg	2405.14 A	1800 A	1100 A	1900 A
Potassium	mg/kg	756.27 A/B	ND(500) A/U	ND(500) A/U	ND(500) A/U
Silver	mg/kg	ND(0.82) A/UN	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	1466.8 A	ND(500) A/U	ND(500) A/U	ND(500) A/U
Vanadium	mg/kg	45.68 A	11.3 A	11.4 A	12.4 A
Zinc	mg/kg	37.69 A	24.9 A/*	26.7 A/*	34.4 A/*
Molybdenum	mg/kg	ND(0.88) A/UN	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) J3	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.6 A	7.4 J5	8.2 J5	8.8 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B018	IR07B018	IR07B018	IR07B018
Sample Depth(feet):	10.75	15.75	20.75	30.25
Sample Number:	9049G558	9049G559	9049G560	9049G561
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-04B	9012058-05B	9012058-06B	9012058-07B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	0.19 J5
CLP-FUAA					
Arsenic	mg/kg	ND(1) A/WU	3.8 A/S	1.5 A	1.5 A/W
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) J3/WU	ND(0.5) J3/WU	ND(0.5) J3/WU	ND(0.5) J3/WU
CLP-ICP					
Aluminum	mg/kg	1800 A/*	15100 A/*	15900 A/*	8300 A/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	ND(20) A/U	71.7 A	128 A	47.6 A
Beryllium	mg/kg	ND(0.5) J3/U	ND(0.5) J3/U	ND(0.5) J3/U	ND(0.5) J3/U
Cadmium	mg/kg	2.4 A	5.6 A	5.5 A	4.9 A
Calcium	mg/kg	ND(500) A/U	12200 A	4300 A	3400 A
Chromium	mg/kg	72.8 A	353 A	340 A	425 A
Cobalt	mg/kg	41 J3	37.4 J3	49.4 J3	47.3 J3
Copper	mg/kg	16.6 A	21 A	24.4 A	18.9 A
Iron	mg/kg	16800 A	38500 A	39800 A	34700 A
Lead	mg/kg	11 J3	ND(10) J3/U	ND(10) J3/U	ND(10) J3/U
Magnesium	mg/kg	140000 A	103000 A	62800 A	157000 A
Manganese	mg/kg	284 A	864 A	1200 A	587 A
Nickel	mg/kg	1200 A	764 A	639 A	1200 A
Potassium	mg/kg	ND(500) A/U	963 A	558 A	ND(500) A/U
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	2100 A	3400 A	1300 A	697 A
Vanadium	mg/kg	11 A	43.3 A	56.7 A	31 A
Zinc	mg/kg	27.8 A/*	51.2 A/*	51.8 A/*	35 A/*
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.5 J5	7.1 J5	7.5 J5	8 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B018	IR07B018	IR07B022	IR07B022
Sample Depth(feet):	40.25	49.75	1.75	3.75
Sample Number:	9049G562	9049G563	9049H562	9049H563
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012058-08B	9012058-09B	9012059-05B	9012059-06B

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.63	J5	0.14	J5	ND(0.1)	J5/U	ND(0.1)	J5/U
CLP-FUAA									
Arsenic	mg/kg	55.8	A	ND(1)	A/WU	2.2	A/+	2.1	A/+
Lead	mg/kg	NA		NA		NA		NA	
Selenium	mg/kg	ND(0.5)	J3/WU	ND(0.5)	J3/WU	ND(0.5)	A/WU	ND(0.5)	A/WU
CLP-ICP									
Aluminum	mg/kg	8900	A/*	3000	A/*	5600	J2/*	7700	J2/*
Antimony	mg/kg	6.3	A	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U
Barium	mg/kg	106	A	ND(20)	A/U	66.5	A/*	77.5	A/*
Beryllium	mg/kg	ND(0.5)	J3/U	ND(0.5)	J3/U	ND(0.5)	J3/NU	ND(0.5)	J3/NU
Cadmium	mg/kg	6.5	A	3.6	A	2.9	A/*	3.6	A/*
Calcium	mg/kg	2400	A	628	A	1100	A/*	2000	A/*
Chromium	mg/kg	777	A	379	A	85.6	A/*	165	A/*
Cobalt	mg/kg	57.1	J3	64.6	J3	19.4	A/*	31.4	A/*
Copper	mg/kg	897	A	25.4	A	118	A/*	16.3	A/*
Iron	mg/kg	41400	A	23300	A	15800	J2/*	23100	J2/*
Lead	mg/kg	37.8	J3	ND(10)	J3/U	11	J2/*	16.3	J2/*
Magnesium	mg/kg	116000	A	80000	A	5700	J2/*	25800	J2/*
Manganese	mg/kg	652	A	797	A	221	J2/*	312	J2/*
Nickel	mg/kg	1200	A	1200	A	129	J2/*	416	J2/*
Potassium	mg/kg	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U
Silver	mg/kg	ND(1)	J3/U	ND(1)	J3/U	ND(1)	J3/U	ND(1)	J3/U
Sodium	mg/kg	1700	A	4100	A	ND(500)	A/U	ND(500)	A/U
Vanadium	mg/kg	44.4	A	18.5	A	35.6	A/*	36.9	A/*
Zinc	mg/kg	55	A/*	21.3	A/*	50	J2/*	39.6	J2/*
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7.8	J5	8.4	J5	7.25	J5	7.3	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

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Station Number:	IR07B022	IR07B022	IR07B024	IR07B024
Sample Depth(feet):	6.75	11.25	2.25	3.75
Sample Number:	9049H564	9049H565	9049H554	9049H555
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	12/05/90	12/05/90
Lab Sample Number:	9012059-07B	9012059-08B	9012059-01B	9012059-02B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.21 J5	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	2 A/+	ND(1) A/WU	2.1 A/S	5.4 A/S
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/U	ND(0.5) A/WU	ND(0.5) A/U	ND(0.5) A/U
CLP-ICP					
Aluminum	mg/kg	6500 J2/*	8700 J2/*	3900 J2/*	7400 J2/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	78.6 A/*	44.6 A/*	48.1 A/*	72.3 A/**
Beryllium	mg/kg	ND(0.5) J3/NU	ND(0.5) J3/NU	ND(0.5) J3/NU	ND(0.5) J3/NU
Cadmium	mg/kg	3.7 A/*	6.4 A/*	2.2 A/*	1.9 A/*
Calcium	mg/kg	8600 A/*	3600 A/*	1400 A/*	2600 A/*
Chromium	mg/kg	95.5 A/*	456 A/*	68.6 A/*	49 A/*
Cobalt	mg/kg	21.5 A/*	80.9 A/*	20.2 A/*	7.3 A/*
Copper	mg/kg	15.9 A/*	26.7 A/*	7.5 A/*	10.2 A/*
Iron	mg/kg	17800 J2/*	42500 J2/*	14200 J2/*	12800 J2/*
Lead	mg/kg	129 J2/*	11.1 J2/*	ND(10) J2/U	19.3 J2/*
Magnesium	mg/kg	11500 J2/*	97500 J2/*	37200 J2/*	6300 J2/*
Manganese	mg/kg	518 J2/*	612 J2/*	306 J2/*	223 J2/*
Nickel	mg/kg	263 J2/*	1500 J2/*	228 J2/*	45.8 J2/*
Potassium	mg/kg	585 A	535 A	ND(500) A/U	ND(500) A/U
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	ND(500) A/U	1400 A	ND(500) A/U	591 A
Vanadium	mg/kg	29.9 A/*	37.6 A/*	25.1 A/*	26.9 A/*
Zinc	mg/kg	131 J2/*	48.3 J2/*	27 J2/*	28.5 J2/*
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	6.8 J5	7.65 J5	7.1 J5	6.8 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07B024	IR07B024	IR07B025	IR07B025
Sample Depth(feet):	6.25	16.25	1.25	3.75
Sample Number:	9049H556	9049H557	9132H789	9132H790
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/05/90	12/05/90	08/07/91	08/07/91
Lab Sample Number:	9012059-03B	9012059-04B	0597210016SA	0597210017SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	0.25 J5	ND(0.11) A	ND(0.12) A
CLP-FUAA					
Arsenic	mg/kg	2.8 A/S	1.6 A/W	ND(0.54) A/W	6.7 A
Lead	mg/kg	NA	NA	5.2 A	41.2 A/S
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.63) J3	ND(0.67) J3
CLP-ICP					
Aluminum	mg/kg	4100 J2/*	4100 J2/*	4140 A	21700 A
Antimony	mg/kg	ND(6) A/U	6.8 A	ND(3.1) J3/N	ND(3.3) J3/N
Barium	mg/kg	51.3 A/*	31.2 A/*	14.7 A/B	243 A
Beryllium	mg/kg	ND(0.5) J3/NU	ND(0.5) J3/NU	0.28 A/B	1 A/B
Cadmium	mg/kg	2 A/*	8 A/*	ND(0.74) A	ND(0.79) A
Calcium	mg/kg	1900 A/*	2200 A/*	5810 J2/*E	3230 J2/*E
Chromium	mg/kg	52.3 A/*	154 A/*	460 J3/N	83.8 J3/N
Cobalt	mg/kg	8.6 A/*	197 A/*	101 A	20.5 A
Copper	mg/kg	8.9 A/*	27.9 A/*	10.5 A	34.6 A
Iron	mg/kg	10800 J2/*	55500 J2/*	48400 A	34200 A
Lead	mg/kg	ND(10) J2/U	ND(10) J2/U	NA	NA
Magnesium	mg/kg	1600 J2/*	150000 J2/*	172000 A	9230 A
Manganese	mg/kg	217 J2/*	548 J2/*	967 A	560 A
Nickel	mg/kg	44.6 J2/*	3100 J2/*	1240 J3/N	99 J3/N
Potassium	mg/kg	518 A	ND(500) A/U	ND(138) U1/B	2030 A
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	0.65 A/B	0.4 A/B
Sodium	mg/kg	ND(500) A/U	700 A	76.7 J3/B	493 J3/B
Vanadium	mg/kg	25.7 A/*	32.1 A/*	22.7 A/E	62.2 A/E
Zinc	mg/kg	19.1 J2/*	52.7 J2/*	37.8 A/E	84.8 A/E
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(0.91) U1/B	ND(2.7) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) J3
EPA-9045					
pH	pH	6.8 J5	8.1 J5	8.3 A	7.5 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B025	IR07B025	IR07B025	IR07B025
Sample Depth(feet):	6.25	11.25	16.25	21.25
Sample Number:	9132H791	9132H792	9132H793	9132H794
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/07/91	08/07/91	08/07/91
Lab Sample Number:	0597210018SA	0597210019SA	0597210020SA	0597500001SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	0.21 A	ND(0.12) A	ND(0.16) A	ND(0.12) A/N
CLP-FUAA					
Arsenic	mg/kg	6.1 A	ND(0.6) A	0.91 A/B	2.4 J3/NB
Lead	mg/kg	NA	0.72 A	NA	41.2 A
Selenium	mg/kg	ND(0.63) J3	ND(0.69) J3	ND(0.91) J3/W	ND(0.72) A
CLP-ICP					
Aluminum	mg/kg	15200 A	2020 A	5690 A	7900 A
Antimony	mg/kg	ND(3.1) J3/N	ND(3.4) J3/N	ND(4.5) J3/N	ND(3.5) J3/N
Barium	mg/kg	159 A	2.8 A/B	43.3 A/B	70.6 A
Beryllium	mg/kg	0.7 A/B	0.31 A/B	0.41 A/B	0.52 A/B
Cadmium	mg/kg	ND(0.74) A	ND(0.82) A	ND(1.1) A	ND(0.85) A
Calcium	mg/kg	8260 J2/*E	1020 J2/B*E	3260 J2/*E	28400 A/E
Chromium	mg/kg	68.8 J3/N	628 J3/N	653 J3/N	217 A/*
Cobalt	mg/kg	14 A	123 A	137 A	36.1 A
Copper	mg/kg	44.2 A	12.9 A	22 A	19.8 A
Iron	mg/kg	24500 A	53800 A	73400 A	26800 A
Lead	mg/kg	199 A	NA	132 A	NA
Magnesium	mg/kg	7820 A	197000 A	131000 A	49700 A
Manganese	mg/kg	363 A	1010 A	986 A	585 A
Nickel	mg/kg	63.5 J3/N	2300 J3/N	2800 J3/N	640 A
Potassium	mg/kg	1980 A	ND(73.7) A	1080 A/B	980 A/B
Silver	mg/kg	ND(0.37) A	0.55 A/B	0.66 A/B	ND(0.42) A
Sodium	mg/kg	242 J3/B	509 J3/B	1790 J3	1020 A/B
Vanadium	mg/kg	53.5 A/E	23.7 A/E	34.9 A/E	33 A/E
Zinc	mg/kg	113 A/E	33.8 A/E	106 A/E	62.7 A/E
Molybdenum	mg/kg	ND(1.8) U1/B	ND(0.78) A	ND(1.5) U1/B	ND(0.89) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.5 A	8.1 A	8 A	11.4 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B025	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	31.25	2.25	4.25	6.25
Sample Number:	9132H795	9133M144	9133M145	9133M146
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/07/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	0597500002SA	08095-05	08095-06	08095-07

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.29	A/N	ND(0.16)	A/U	ND(0.16)	A/U	ND(0.15)	A/U
CLP-FUAA									
Arsenic	mg/kg	1.9	J3/NB	3.22	A/N	2.75	A/N	5.72	A/N
Lead	mg/kg	24.5	A	38.3	A/S	41.1	A/S	6.58	A
Selenium	mg/kg	ND(0.71)	A	ND(0.6)	A/UNW	ND(0.6)	A/UNW	ND(0.58)	A/UN
CLP-ICP									
Aluminum	mg/kg	7710	A	9299.26	A	12788.8	A	20702.4	A
Antimony	mg/kg	ND(3.5)	J3/N	ND(3)	A/UN	ND(3)	A/UN	3.8	A/BN
Barium	mg/kg	59.7	A	102.75	A	112.2	A	173.34	A
Beryllium	mg/kg	0.57	A/B	0.72	A/B	0.9	A/B	1.39	A
Cadmium	mg/kg	ND(0.84)	A	ND(0.35)	A/U	ND(0.35)	A/U	0.51	A/B
Calcium	mg/kg	5930	A/E	1893.05	A	2925.76	A	2847.37	A
Chromium	mg/kg	230	A/*	114.31	A	133.96	A	60.3	A
Cobalt	mg/kg	34.9	A	26.67	A	32.73	A	22.33	A
Copper	mg/kg	22.1	A	18.4	A	17.74	A	30.46	A
Iron	mg/kg	28600	A	21849.3	A	28030.4	A	30829.2	A
Lead	mg/kg	NA		NA		NA		NA	
Magnesium	mg/kg	58200	A	9025.31	A	6028.9	A	5552.83	A
Manganese	mg/kg	414	A	313.96	A	706.56	A	935.87	A
Nickel	mg/kg	632	A	237.47	A	242.94	A	63.4	A
Potassium	mg/kg	858	A/B	579.75	A/B	649.25	A/B	1647.63	A
Silver	mg/kg	ND(0.42)	A	ND(0.77)	A/UN	ND(0.77)	A/UN	ND(0.74)	A/UN
Sodium	mg/kg	763	A/B	124.44	A/B	274.32	A/B	1069.68	A/B
Vanadium	mg/kg	30.3	A/E	50.59	A	65.66	A	63.22	A
Zinc	mg/kg	58.3	A/E	64.06	A	61.52	A	55.65	A
Molybdenum	mg/kg	ND(0.86)	U1/B	ND(0.81)	A/UN	ND(0.81)	A/UN	ND(0.79)	A/UN
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	9.1	J5	7.2	A	8	A	8.6	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

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Station Number:	IR07B030	IR07B030	IR07B030	IR07B030
Sample Depth(feet):	11.25	16.25	21.25	31.25
Sample Number:	9133M147	9133M148	9133M149	9133M150
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/13/91	08/13/91	08/13/91
Lab Sample Number:	08095-08	08095-09	08095-10	08095-11

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.16) A/U	ND(0.18) A/U	ND(0.16) A/U	ND(0.16) A/U
CLP-FUAA					
Arsenic	mg/kg	1.14 A/BN	0.97 A/BN	ND(0.57) A/UNW	4.6 A/N
Lead	mg/kg	10.65 A	26.28 A/S	8.19 A/S	5.85 A
Selenium	mg/kg	ND(0.62) A/UN	ND(0.69) A/UN	ND(0.62) A/UNW	ND(0.63) A/UNW
CLP-ICP					
Aluminum	mg/kg	11599.8 A	7071.48 A	5385.78 A	12588.8 A
Antimony	mg/kg	ND(3.1) A/UN	ND(3.5) A/UN	ND(3.1) A/UN	ND(3.2) A/UN
Barium	mg/kg	38.53 A/B	110.7 A	104.13 A	145.86 A
Beryllium	mg/kg	0.4 A/B	0.38 A/B	0.42 A/B	0.69 A/B
Cadmium	mg/kg	ND(0.36) A/U	ND(0.4) A/U	ND(0.36) A/U	ND(0.36) A/U
Calcium	mg/kg	3370.9 A	3292.81 A	3548.86 A	2696.72 A
Chromium	mg/kg	324.97 A	345.75 A	317.71 A	113.9 A
Cobalt	mg/kg	132.62 A	137.19 A	84.75 A	95.7 A
Copper	mg/kg	12.69 A	23.2 A	22.29 A	10.18 A
Iron	mg/kg	60281 A	57709.4 A	35678.5 A	24589.4 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	127515 A	114811 A	67509.1 A	5371.94 A
Manganese	mg/kg	1142.86 A	1225.8 A	887.55 A	1408.45 A
Nickel	mg/kg	2629.46 A	3550.63 A	1524.18 A	245.23 A
Potassium	mg/kg	485.58 A/B	599.77 A/B	452.5 A/B	1139.51 A/B
Silver	mg/kg	ND(0.79) A/UN	ND(0.88) A/UN	ND(0.79) A/UN	ND(0.8) A/UN
Sodium	mg/kg	996.83 A/B	562.96 A/B	817.11 A/B	1308.97 A
Vanadium	mg/kg	42.44 A	36.39 A	29.94 A	54.64 A
Zinc	mg/kg	57.84 A	71.8 A	45.34 A	35.12 A
Molybdenum	mg/kg	ND(0.83) A/UN	ND(0.93) A/UN	ND(0.83) A/UN	ND(0.84) A/UN
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.6 A	8.2 A	8.4 A	8.3 A

Notes:

Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B030	IR07B032	IR07B032	IR07B032
Sample Depth(feet):	41.25	1.75	3.75	6.25
Sample Number:	9133M151	9133H847	9133H848	9133H849
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/13/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	08095-12	0598840013SA	0598840014SA	0598840015SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.17) A/U	0.12 A	ND(0.11) A	0.18 A
CLP-FUAA					
Arsenic	mg/kg	1.51 A/BN	3.3 J3/N	4.8 J3/N	7.3 J3/N+
Lead	mg/kg	6.76 A/S	14.2 A/S	115 A	30.5 A
Selenium	mg/kg	ND(0.65) A/UNW	ND(0.67) J3/N	ND(0.66) J3/N	ND(3.4) J3/NW
CLP-ICP					
Aluminum	mg/kg	18484.5 A	16800 A	14000 A	18900 A
Antimony	mg/kg	ND(3.3) A/UN	ND(3.3) A	44.1 A	ND(10.6) U1/B
Barium	mg/kg	75.91 A	96.1 A	99.5 A	144 A
Beryllium	mg/kg	0.69 A	0.81 A/B	0.8 A/B	1.1 A/B
Cadmium	mg/kg	ND(0.38) A/U	ND(0.79) A	ND(0.78) A	ND(0.79) A
Calcium	mg/kg	3825.25 A	4500 A/E	8050 A/E	6750 A/E
Chromium	mg/kg	288.25 A	210 A	213 A	54 A
Cobalt	mg/kg	71.1 A	25.4 A	42.2 A	10.7 A
Copper	mg/kg	15.53 A	19.4 A/E	93 A/E	24.6 A/E
Iron	mg/kg	35437 A	36500 A	40500 A	26500 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	16646.9 A	18600 A	45300 A	7560 A
Manganese	mg/kg	961.48 A	358 A	590 A	385 A
Nickel	mg/kg	792.91 A	299 A	446 A	48.4 A
Potassium	mg/kg	856.53 A/B	938 J3/B	771 J3/B	2400 J3
Silver	mg/kg	ND(0.82) A/UN	0.14 A/B	0.14 A/B	ND(0.39) A
Sodium	mg/kg	2083.7 A	740 A/B	771 A/B	324 A/B
Vanadium	mg/kg	39.6 A	80.6 A/E	70.5 A/E	56.3 A/E
Zinc	mg/kg	42.1 A	57.4 A	206 A	66.2 A
Molybdenum	mg/kg	ND(0.88) A/UN	ND(3.4) U1/B	ND(3.2) U1/B	ND(2.5) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8 A	7.8 A	8.1 A	7.7 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B032	IR07B032	IR07B032	IR07B033
Sample Depth(feet):	11.25	16.75	21.25	1.75
Sample Number:	9133H850	9133H851	9133H852	9133H841
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840016SA	0598840017SA	0598840018SA	0598840007SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.38	A	0.46	A	0.23	A	ND(0.11)	A
CLP-FUAA									
Arsenic	mg/kg	5.1	J3/N	4.9	J3/NS	4.4	J3/N	0.59	J3/BN
Lead	mg/kg	NA		NA		NA		2.4	A/S
Selenium	mg/kg	ND(0.62)	J3/NW	ND(0.67)	J3/N	ND(0.71)	J3/NW	ND(0.63)	J3/N
CLP-ICP									
Aluminum	mg/kg	12500	A	11000	A	18800	A	2800	A
Antimony	mg/kg	ND(6)	U1	ND(4.7)	U1/B	ND(7.3)	U1/B	ND(3.1)	A
Barium	mg/kg	164	A	303	A	214	A	10.5	A/B
Beryllium	mg/kg	0.74	A/B	ND(0.49)	U1/B	0.85	A/B	ND(0.46)	U1/B
Cadmium	mg/kg	0.8	A/B	0.98	A/B	ND(0.83)	A	ND(0.75)	A
Calcium	mg/kg	9490	A/E	10700	A/E	4980	A/E	4090	A/E
Chromium	mg/kg	47.9	A	52.1	A	61.9	A	277	A
Cobalt	mg/kg	13.2	A	10.9	A/B	11.7	A/B	90.2	A
Copper	mg/kg	26.5	A/E	38	A/E	23.2	A/E	8.9	A/E
Iron	mg/kg	21000	A	16700	A	23000	A	44300	A
Lead	mg/kg	92	A	273	A	167	A	NA	
Magnesium	mg/kg	5320	A	3910	A	4400	A	162000	A
Manganese	mg/kg	475	A	291	A	284	A	974	A
Nickel	mg/kg	40.3	A	49	A	46.9	A	1250	A
Potassium	mg/kg	1780	J3	1180	J3	2920	J3	284	J3/B
Silver	mg/kg	ND(0.36)	A	ND(0.39)	A	ND(0.41)	A	0.18	A/B
Sodium	mg/kg	363	A/B	622	A/B	1570	A	1120	A
Vanadium	mg/kg	41.7	A/E	44.6	A/E	54.6	A/E	17.9	A/E
Zinc	mg/kg	88.6	A	216	A	131	A	36.8	A
Molybdenum	mg/kg	ND(2.4)	U1/B	ND(2.7)	U1/B	ND(2.2)	U1/B	ND(2.1)	U1/B
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	8.2	A	8.3	A	8.3	A	8.1	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B033	IR07B033	IR07B033	IR07B033
Sample Depth(feet):	4.25	6.75	11.75	21.25
Sample Number:	9133H842	9133H843	9133H844	9133H845
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/12/91	08/12/91	08/12/91
Lab Sample Number:	0598840008SA	0598840009SA	0598840010SA	0598840011SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.11) A	ND(0.11) A	0.13 A	ND(0.13) A
CLP-FUAA					
Arsenic	mg/kg	5.9 J3/N	6.2 J3/NS	6.8 J3/N	2.8 J3/N
Lead	mg/kg	14.9 A/S	146 A	77.4 A	7.1 A
Selenium	mg/kg	ND(0.67) J3/N	ND(0.66) J3/N	ND(0.68) J3/N	ND(0.73) J3/N
CLP-ICP					
Aluminum	mg/kg	20200 A	17200 A	23500 A	9240 A
Antimony	mg/kg	ND(18.1) U1	ND(3.3) A	ND(3.3) A	ND(3.6) U1/B
Barium	mg/kg	89.3 A	139 A	648 A	72.8 A
Beryllium	mg/kg	1.2 A	0.79 A/B	1.2 A/B	ND(0.53) U1/B
Cadmium	mg/kg	ND(0.78) A	ND(0.78) A	ND(0.8) A	ND(0.86) A
Calcium	mg/kg	11500 A/E	11900 A/E	11400 A/E	4860 A/E
Chromium	mg/kg	61.3 A	450 A	259 A	631 A
Cobalt	mg/kg	13.8 A	46.5 A	49.5 A	80.6 A
Copper	mg/kg	39.1 A/E	38 A/E	155 A/E	21.4 A/E
Iron	mg/kg	43600 A	40800 A	50100 A	46900 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	17100 A	97200 A	53300 A	159000 A
Manganese	mg/kg	1010 A	709 A	5800 A	720 A
Nickel	mg/kg	84.5 A	837 A	565 A	1550 A
Potassium	mg/kg	1370 J3	977 J3	2200 J3	472 J3/B
Silver	mg/kg	0.53 A/B	0.07 A/B	1.2 A/B	0.13 A/B
Sodium	mg/kg	291 A/B	841 A/B	1370 A	543 A/B
Vanadium	mg/kg	49.7 A/E	55.1 A/E	97.4 A/E	45.2 A/E
Zinc	mg/kg	146 A	56.8 A	102 A	43.8 A
Molybdenum	mg/kg	ND(3.5) U1/B	ND(2.9) U1/B	ND(5.1) U1	ND(1.8) U1/B
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.7 A	8.8 A	8.1 A	8 A

Notes:

Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B033	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	31.25	1.75	3.75	6.25
Sample Number:	9133H846	9132H815	9132H816	9132H817
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/12/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	0598840012SA	08094-01	08094-02	08094-03

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.13) A	ND(0.16) A/U	ND(0.16) A/U	ND(0.16) A/U
CLP-FUAA					
Arsenic	mg/kg	9.1 J3/N	5.34 A	1.29 A/B	ND(0.57) A/U
Lead	mg/kg	7.9 A	42.65 A	20.33 A	20.38 A/S
Selenium	mg/kg	ND(0.77) J3/NW	ND(0.61) A/UNW	ND(0.6) A/UNW	ND(0.61) A/UNW
CLP-ICP					
Aluminum	mg/kg	19300 A	10046 A	4860.42 A	2767.82 A
Antimony	mg/kg	ND(4.4) U1/B	ND(3.29) U1/BN	ND(3) A/UN	ND(3.1) A/UN
Barium	mg/kg	32.6 A/B	154.47 A	25.26 A/B	11.99 A/B
Beryllium	mg/kg	0.93 A/B	1.04 A/B	0.45 A/B	0.2 A/B
Cadmium	mg/kg	1 A/B	ND(0.35) A/U	ND(0.35) A/U	ND(0.35) A/U
Calcium	mg/kg	11100 A/E	4345.05 A	2514.88 A	1692.1 A
Chromium	mg/kg	112 A	381.84 A	640.54 A	480.44 A
Cobalt	mg/kg	17.9 A	67.13 A	97.45 A	100.46 A
Copper	mg/kg	27.1 A/E	34.3 A	45.59 A	12.1 A
Iron	mg/kg	36900 A	38490.2 A	46493.1 A	45265.9 A
Lead	mg/kg	NA	NA	NA	NA
Magnesium	mg/kg	18700 A	95849.3 A	156537 A	188075 A
Manganese	mg/kg	357 A	1040.25 A	851.52 A	984.96 A
Nickel	mg/kg	159 A	1072.8 A	2043.59 A	2173.37 A
Potassium	mg/kg	3550 J3	823.13 A/B	281.25 A/B	ND(173) A/U
Silver	mg/kg	0.29 A/B	ND(0.78) A/UN	ND(0.81) U1/BN	ND(0.84) U1/BN
Sodium	mg/kg	4680 A	255.09 A/B	164.24 A/B	1359.53 A
Vanadium	mg/kg	63.6 A/E	42.66 A	31.02 A	20.71 A
Zinc	mg/kg	65.1 A	73.72 A	49.54 A	38.18 A
Molybdenum	mg/kg	ND(4.3) U1/B	ND(0.82) A/U	ND(0.81) A/U	ND(0.83) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.6 A	7.6 A	7.5 A	7.5 A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B034	IR07B034	IR07B034	IR07B034
Sample Depth(feet):	11.25	16.25	20.75	31.75
Sample Number:	9132H818	9132H819	9132H820	9132H821
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	08/08/91	08/08/91	08/08/91
Lab Sample Number:	08094-04	08094-05	08094-06	08094-07

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	ND(0.17)	A/U	ND(0.18)	A/U	ND(0.17)	A/U	ND(0.17)	A/U
CLP-FUAA									
Arsenic	mg/kg	1.11	A/B	0.97	A/B	1.44	A/B	3.39	A
Lead	mg/kg	23.9	A/S	2.9	A/S	6.36	A	18.31	A
Selenium	mg/kg	ND(0.66)	A/UNW	ND(0.67)	A/UN	ND(0.63)	A/UN	ND(0.64)	A/UNW
CLP-ICP									
Aluminum	mg/kg	3538.97	A	1375.35	A	4892.81	A	14817.9	A
Antimony	mg/kg	ND(3.3)	A/UN	ND(3.4)	A/UN	ND(5.04)	U1/BN	ND(3.45)	U1/BN
Barium	mg/kg	472.4	A	8.47	A/B	275.85	A	151.07	A
Beryllium	mg/kg	0.27	A/B	0.26	A/B	0.75	A/B	0.86	A/B
Cadmium	mg/kg	ND(0.38)	A/U	ND(0.38)	A/U	ND(0.37)	A/U	ND(0.37)	A/U
Calcium	mg/kg	503.97	A/B	372.04	A/B	316.01	A/B	3922.31	A
Chromium	mg/kg	105.1	A	83.43	A	41.86	A	185.28	A
Cobalt	mg/kg	72.06	A	102.46	A	18.1	A	33.06	A
Copper	mg/kg	23.37	A	2.69	A/B	52.94	A	37.72	A
Iron	mg/kg	37395.3	A	32301.5	A	31964.2	A	29499.3	A
Lead	mg/kg	NA		NA		NA		NA	
Magnesium	mg/kg	138656	A	110464	A	17960.5	A	30342.8	A
Manganese	mg/kg	1115.47	A	1456.4	A	865.64	A	400.51	A
Nickel	mg/kg	1711.95	A	1914.2	A	208.33	A	310.86	A
Potassium	mg/kg	980.16	A/B	441.21	A/B	1731.55	A	1203.14	A/B
Silver	mg/kg	ND(0.84)	A/UN	ND(0.85)	A/UN	ND(0.8)	A/UN	ND(0.81)	A/UN
Sodium	mg/kg	3191.7	A	3657.46	A	3341.74	A	1011.53	A/B
Vanadium	mg/kg	20.04	A	24.14	A	54.8	A	61.54	A
Zinc	mg/kg	105.18	A	23	A	13.87	A	54.96	A
Molybdenum	mg/kg	ND(0.89)	A/U	ND(0.9)	A/U	ND(0.85)	A/U	ND(0.86)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7	A	7.4	A	6.7	A	7.3	A

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07B034	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	41.25	0.75	2.75	5.25
Sample Number:	9132H822	9049G564	9049G565	9049G566
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	08/08/91	12/06/90	12/06/90	12/06/90
Lab Sample Number:	08094-08	9012066-01B	9012066-02B	9012066-03B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.18) A/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	1.93 A/B	2.1 J3/W	2.1 J3/NW	1.7 J3/W
Lead	mg/kg	16.73 A/+	NA	NA	NA
Selenium	mg/kg	ND(0.69) A/UNW	ND(0.5) A/WU	ND(0.5) A/U	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	28419.5 A	12000 A/*	14000 A/*	16700 A/*
Antimony	mg/kg	ND(7.13) U1/BN	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	261.04 A	103 A/*	116 A/*	162 A/*
Beryllium	mg/kg	0.89 A/B	0.6 A	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	ND(0.4) A/U	5.2 A	4.5 A	4.8 A
Calcium	mg/kg	9519.52 A	5250 A	4770 A	7570 A
Chromium	mg/kg	440.92 A	391 J3	187 J3	286 J3
Cobalt	mg/kg	80.14 A	57.3 J2/*	35.9 J2/*	41.3 J2/*
Copper	mg/kg	37.26 A	50.8 A	24.2 A	74.9 A
Iron	mg/kg	39605.2 A	39200 A	29600 A	36200 A
Lead	mg/kg	NA	25.8 A	18.3 A	22.1 A
Magnesium	mg/kg	121429 A	76600 A/*	64900 A/*	75400 A/*
Manganese	mg/kg	1172.5 A	661 A	494 A	833 A
Nickel	mg/kg	984.02 A	1058 J2/*	562 J2/*	651 J2/*
Potassium	mg/kg	336.93 A/B	797 A/*	975 A/*	1270 A/*
Silver	mg/kg	ND(0.88) A/UN	2.3 A	ND(1) A/U	ND(1) A/U
Sodium	mg/kg	1285.23 A/B	ND(500) A/U	897 A	ND(500) A/U
Vanadium	mg/kg	59.2 A	45.6 A	33.7 A	45.9 A
Zinc	mg/kg	65.76 A	50 A	47.5 A	62 A
Molybdenum	mg/kg	ND(0.93) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.6 A	7.3 J5	7.35 J5	7.1 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW19A	IR07MW19A
Sample Depth(feet):	10.25	15.25	20.25	29.75
Sample Number:	9049G567	9049G568	9049G569	9049G570
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/06/90
Lab Sample Number:	9012066-04B	9012066-05B	9012066-06B	9012066-07B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	ND(1) J3/WU	2.5 J3	8 J3	15.6 J3
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	2840 A/*	7890 A/*	36700 A/*	15900 A/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	111 A/*	45.7 A/*	99 A/*	145 A/*
Beryllium	mg/kg	0.5 A	0.5 A	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	5.5 A	4.7 A	6.7 A	4.5 A
Calcium	mg/kg	ND(500) A/U	1920 A	8280 A	3510 A
Chromium	mg/kg	51.4 J3	508 J3	305 J3	90.8 J3
Cobalt	mg/kg	84.4 J2/*	48.3 J2/*	35.5 J2/*	18.6 J2/*
Copper	mg/kg	28.3 A	20.6 A	42.7 A	27.5 A
Iron	mg/kg	37100 A	36900 A	51600 A	32900 A
Lead	mg/kg	11.2 A	16.2 A	33.4 A	23.7 A
Magnesium	mg/kg	83700 A/*	79100 A/*	70200 A/*	13200 A/*
Manganese	mg/kg	1090 A	557 A	783 A	473 A
Nickel	mg/kg	1200 J2/*	1090 J2/*	482 J2/*	152 J2/*
Potassium	mg/kg	899 A/*	667 A/*	1570 A/*	1820 A/*
Silver	mg/kg	1.4 A	ND(1) A/U	ND(1) A/U	ND(1) A/U
Sodium	mg/kg	2820 A	824 A	ND(500) A/U	1080 A
Vanadium	mg/kg	41.7 A	50.9 A	80.5 A	45.4 A
Zinc	mg/kg	40.5 A	38.1 A	75.9 A	66 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) R2	NA
EPA-9045					
pH	pH	7.15 J5	7.35 J5	7.05 J5	7 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	40.25	49.75	1.25	2.75
Sample Number:	9049G571	9049G572	9049G575	9049G576
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/07/90	12/07/90
Lab Sample Number:	9012066-08B	9012066-09B	9012068-01C	9012068-02C

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	1.5 J3	5.4 J3	ND(1) J3/U	ND(1) J3/U
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
CLP-ICP					
Aluminum	mg/kg	10800 A/*	6580 A/*	6900 A	2640 A
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	66.9 A/*	65.8 A/*	75.9 A/*	ND(20) A/U
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	4.3 A	2.4 A	7 A	4.3 A
Calcium	mg/kg	2770 A	3320 A	2420 J2/*	727 J2/*
Chromium	mg/kg	491 J3	207 J3	613 J23/*	161 J23/*
Cobalt	mg/kg	58 J2/*	27.3 J2/*	89.2 A	88.6 A
Copper	mg/kg	116 A	29 A	21.3 A	6 A
Iron	mg/kg	35400 A	18900 A	48900 A	29900 A
Lead	mg/kg	19 A	10.7 A	43.6 A	11.5 A
Magnesium	mg/kg	82600 A/*	50300 A/*	136000 A	165000 A
Manganese	mg/kg	525 A	380 A	1110 J2/*	583 J2/*
Nickel	mg/kg	1120 J2/*	460 J2/*	1640 A/*	1770 A/*
Potassium	mg/kg	761 A/*	956 A/*	703 A	ND(500) A/U
Silver	mg/kg	ND(1) A/U	ND(1) A/U	ND(1) A/U	ND(1.1) U1
Sodium	mg/kg	996 A	1420 A	ND(500) A/U	ND(500) A/U
Vanadium	mg/kg	39.3 A	28.6 A	33.9 A	24.2 A
Zinc	mg/kg	45.1 A	27.1 A	67.7 A	31.5 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	NA	ND(50) A	ND(50) J3
EPA-9045					
pH	pH	7.75 J5	7.95 J5	8.15 J5	7.35 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
 Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	5.25	10.25	15.25	20.25
Sample Number:	9049G577	9049G578	9049G579	9049G580
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012068-03C	9012068-04C	9012068-05B	9012068-06B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	0.17 J5	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	ND(1) J3/U	ND(1) J3/U	1.6 J3/W	ND(1) J3/U
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/U	ND(0.5) A/WU	ND(0.5) A/WU	0.5 A/W
CLP-ICP					
Aluminum	mg/kg	7910 A	4860 A	3670 A	508 A
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	44.6 A/*	34.3 A/*	194 A/*	ND(20) A/U
Beryllium	mg/kg	0.5 A	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	7.8 A	6.4 A	2.3 A	4.2 A
Calcium	mg/kg	2300 J2/*	1750 J2/*	1280 J2/*	ND(500) J2/U
Chromium	mg/kg	723 J23/*	182 J23/*	70.6 J23/*	131 J23/*
Cobalt	mg/kg	93.5 A	116 A	36.3 A	53.8 A
Copper	mg/kg	18.2 A	10.5 A	25 A	3 A
Iron	mg/kg	49800 A	42600 A	16000 A	29600 A
Lead	mg/kg	84.5 A	26 A	12.7 A	10.1 A
Magnesium	mg/kg	157000 A	129000 A	38700 A	183000 A
Manganese	mg/kg	733 J2/*	757 J2/*	847 J2/*	345 J2/*
Nickel	mg/kg	1770 A/*	2030 A/*	553 A/*	1710 A/*
Potassium	mg/kg	857 A	1480 A	1240 A	596 A
Silver	mg/kg	ND(1) A/U	ND(1) A/U	ND(1) A/U	ND(1) A/U
Sodium	mg/kg	ND(500) A/U	6060 A	2760 A	3510 A
Vanadium	mg/kg	39.6 A	26 A	21.1 A	11.1 A
Zinc	mg/kg	67.3 A	62.1 A	23.6 A	31.1 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	7.2 J5	7.3 J5	8.05 J5	7 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	30.75	40.75	0.62	2.62
Sample Number:	9049G581	9049G582	9049G547	9049G548
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/04/90	12/04/90
Lab Sample Number:	9012068-07B	9012068-08B	9012041-02C	9012041-03C

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.2	J5	ND(0.1)	J5/U	ND(0.1)	J5/U	ND(0.1)	J5/U
CLP-FUAA									
Arsenic	mg/kg	1.7	J3	ND(1)	J3/U	ND(1)	A/U	ND(1)	A/WU
Lead	mg/kg	NA		NA		NA		NA	
Selenium	mg/kg	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU	ND(0.5)	A/WU
CLP-ICP									
Aluminum	mg/kg	15100	A	5860	A	1500	A/*	3600	A/*
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U
Barium	mg/kg	131	A/*	44	A/*	ND(20)	A/U	25.6	A
Beryllium	mg/kg	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U
Cadmium	mg/kg	4.5	A	5.5	A	3.7	J3	5.8	J3
Calcium	mg/kg	8340	J2/*	1420	J2/*	4200	A	6400	A
Chromium	mg/kg	477	J23/*	535	J23/*	210	A	1300	A
Cobalt	mg/kg	54.1	A	77.5	A	80.2	J3/N	84	J3/N
Copper	mg/kg	24.4	A	25.4	A	14.8	J3/N*	16.4	J3/N*
Iron	mg/kg	34200	A	42100	A	28200	A	46000	A
Lead	mg/kg	21.5	A	18.5	A	ND(6)	J3/U	83	J3
Magnesium	mg/kg	126000	A	153000	A	189100	A	228500	A
Manganese	mg/kg	579	J2/*	931	J2/*	873	A/N	753	A
Nickel	mg/kg	917	A/*	1440	A/*	1300	A/N	2000	A
Potassium	mg/kg	994	A	548	A	ND(500)	A/U	ND(500)	A/U
Silver	mg/kg	ND(1)	A/U	ND(1)	A/U	ND(1)	A/U	ND(1)	A/U
Sodium	mg/kg	2450	A	902	A	ND(500)	A/U	ND(500)	A/U
Vanadium	mg/kg	41.5	A	22.7	A	13.5	A	26.3	A
Zinc	mg/kg	44.7	A	41.4	A	26.6	A	68.7	A
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	J3	ND(50)	A
EPA-9045									
pH	pH	7.4	A	7.95	J5	8	J5	8.55	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW21A2	IR07MW21A2
Sample Depth(feet):	5.62	10.12	15.12	19.62
Sample Number:	9049G549	9049G550	9049G551	9049G552
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/04/90	12/04/90
Lab Sample Number:	9012041-04C	9012041-05C	9012041-06B	9012041-07B

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-CVAA									
Mercury	mg/kg	0.63	J5	0.16	J5	ND(0.1)	J5/U	ND(0.1)	J5/U
CLP-FUAA									
Arsenic	mg/kg	7.1	A	3.3	A	ND(1)	A/WU	ND(1)	A/WU
Lead	mg/kg	NA		NA		NA		NA	
Selenium	mg/kg	ND(0.5)	A/WU	ND(0.5)	A/WU	0.7	A	ND(0.5)	A/U
CLP-ICP									
Aluminum	mg/kg	10400	A/*	5200	A/*	2400	A/*	1800	A/*
Antimony	mg/kg	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U	ND(6)	A/U
Barium	mg/kg	177	A	30.1	A	ND(20)	A/U	ND(20)	A/U
Beryllium	mg/kg	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U	ND(0.5)	A/U
Cadmium	mg/kg	5	J3	5.4	J3	7.4	J3	5.8	J3
Calcium	mg/kg	6300	A	3000	A	1900	A	1500	A
Chromium	mg/kg	59.9	A	302	A	529	A	617	A
Cobalt	mg/kg	17.2	J3/N	53.6	J3/N	73.8	J3/N	56.3	J3/N
Copper	mg/kg	28.6	J3/N*	13.3	J3/N*	10.4	J3/N*	8.8	J3/N*
Iron	mg/kg	22100	A	30200	A	50000	A	41600	A
Lead	mg/kg	122	J3	21.7	J3	ND(6)	J3/U	ND(6)	J3/U
Magnesium	mg/kg	11100	A	109100	A	158000	A	162000	A
Manganese	mg/kg	406	A	517	A	573	A	516	A
Nickel	mg/kg	170	A	1200	A	2100	A	1800	A
Potassium	mg/kg	900	A	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U
Silver	mg/kg	ND(1)	A/U	ND(1)	A/U	ND(1)	A/U	ND(1)	A/U
Sodium	mg/kg	ND(500)	A/U	ND(500)	A/U	ND(500)	A/U	1200	A
Vanadium	mg/kg	28.3	A	23.3	A	21	A	19.2	A
Zinc	mg/kg	126	A	42.1	A	35.4	A	25.9	A
Molybdenum	mg/kg	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U	ND(10)	A/U
EPA-7196									
Chromium VI	ug/kg	ND(50)	A	ND(50)	A	ND(50)	A	ND(50)	A
EPA-9045									
pH	pH	7.95	J5	8.5	J5	8.7	J5	7.95	J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW23A	IR07MW23A
Sample Depth(feet):	30.62	35.62	1.75	3.75
Sample Number:	9049G553	9049G554	9049H572	9049H573
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/04/90	12/04/90	12/06/90	12/06/90
Lab Sample Number:	9012041-08B	9012041-09B	9012069-01B	9012069-02B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	0.23 J5	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	1.4 A/W	7.4 A	3.5 A	ND(1) A/U
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/WU
CLP-ICP					
Aluminum	mg/kg	5700 A/*	11900 A/*	8750 A	12000 A
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) A/U
Barium	mg/kg	65 A	20 A	91.8 A	89.9 A
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	2.3 J3	3.8 J3	ND(0.5) A/U	ND(0.5) A/U
Calcium	mg/kg	6900 A	2000 A	20400 J2/*	5146 J2/*
Chromium	mg/kg	52.8 A	60.4 A	230 J2/*	381 J2/*
Cobalt	mg/kg	13.1 J3/N	10.5 J3/N	22.8 A/*	53.3 A/*
Copper	mg/kg	27.1 J3/N*	23.9 J3/N*	18.5 A	24.9 A
Iron	mg/kg	13700 A	24100 A	20700 A	35800 A
Lead	mg/kg	109 J3	ND(6) J3/U	45.5 A/*	15.1 A/*
Magnesium	mg/kg	12600 A	9500 A	49400 J2/*	119100 J2/*
Manganese	mg/kg	289 A	190 A	528 A/*	653 A/*
Nickel	mg/kg	131 A	50.8 A	398 J23/N*	1180 J23/N*
Potassium	mg/kg	575 A	2500 A	998 A	670 A
Silver	mg/kg	ND(1) A/U	ND(1) A/U	1.6 J3/*	ND(1) J3/*U
Sodium	mg/kg	1100 A	3400 A	ND(500) A/U	738 A
Vanadium	mg/kg	26.2 A	37.4 A	32.7 A	53.1 A
Zinc	mg/kg	93.7 A	50.4 A	73.6 A	57.1 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A	ND(50) A
EPA-9045					
pH	pH	8.45 J5	8.75 J5	7.7 J5	7.5 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
Analytical Results for Inorganic Compounds Detected in Soil Samples
and Intertidal Sediment Samples, Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW23A	IR07MW23A	IR07MW23A	IR07SS26
Sample Depth(feet):	6.25	11.25	15.25	0.00
Sample Number:	9049H574	9049H575	9049H576	9049N240
Matrix:	SOIL	SOIL	SOIL	SOIL
Sample Date:	12/06/90	12/06/90	12/06/90	12/07/90
Lab Sample Number:	9012069-03B	9012069-04B	9012069-05B	9012072-04B

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-CVAA					
Mercury	mg/kg	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA					
Arsenic	mg/kg	2.9 A	ND(1) A/U	ND(1) A/U	4.5 J3/N*
Lead	mg/kg	NA	NA	NA	NA
Selenium	mg/kg	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) A/WU	ND(0.5) J3/NU
CLP-ICP					
Aluminum	mg/kg	12600 A	1354 A	5134 A	3000 A/*
Antimony	mg/kg	ND(6) A/U	ND(6) A/U	ND(6) A/U	ND(6) J3/U
Barium	mg/kg	211 A	ND(20) A/U	24.9 A	ND(20) A/U
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	ND(0.5) A/U	0.5 A	ND(0.5) A/U	ND(0.5) A/U
Calcium	mg/kg	13600 J2/*	797 J2/*	2386 J2/*	17400 J2/*
Chromium	mg/kg	39.1 J2/*	115 J2/*	286 J2/*	143 J23/*
Cobalt	mg/kg	9.6 A/*	85.4 A/*	106 A/*	11 A/*
Copper	mg/kg	22 A	ND(2.5) A/U	11.8 A	66.8 J2/N*
Iron	mg/kg	22300 A	31400 A	45800 A	12900 A
Lead	mg/kg	120 A/*	ND(10) A/*U	18.5 A/*	120 J3/N*
Magnesium	mg/kg	5944 J2/*	195700 J2/*	143600 J2/*	30300 J2/*
Manganese	mg/kg	375 A/*	566 A/*	783 A/*	192 J23/N
Nickel	mg/kg	45 J23/N*	1456 J23/N*	1994 J23/*	254 J23/N*
Potassium	mg/kg	1797 A	ND(500) A/U	530 A	ND(500) A/U
Silver	mg/kg	ND(1) J3/*U	ND(1) J3/*U	ND(1) J3/*U	ND(1) J3/U
Sodium	mg/kg	627 A	ND(500) A/U	ND(500) A/U	1240 A
Vanadium	mg/kg	35.7 A	12.8 A	30.5 A	16.5 A
Zinc	mg/kg	90.9 A	30.4 A	62 A	148 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196					
Chromium VI	ug/kg	ND(50) A	ND(50) R2	NA	ND(50) A
EPA-9045					
pH	pH	8.8 J5	8.2 J5	8 J5	8.45 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-2
**Analytical Results for Inorganic Compounds Detected in Soil Samples
 and Intertidal Sediment Samples, Sub-Base Area, IR-7
 Hunters Point Annex**

Station Number:	IR07SS27	IR07SS28	IR07SS29
Sample Depth(feet):	0.00	0.00	0.00
Sample Number:	9049N239	9049N238	9049N237
Matrix:	SOIL	SOIL	SOIL
Sample Date:	12/07/90	12/07/90	12/07/90
Lab Sample Number:	9012072-03B	9012072-02B	9012072-01B

Test Method/Analyte Name	Units	value qual	value qual	value qual
CLP-CVAA				
Mercury	mg/kg	0.33 J5	ND(0.1) J5/U	ND(0.1) J5/U
CLP-FUAA				
Arsenic	mg/kg	8.6 J3/N*	3 J3/N*	1.1 J3/NW*
Lead	mg/kg	NA	NA	NA
Selenium	mg/kg	ND(0.5) J3/NU	1 J3/NW*	ND(0.5) J3/NW*U
CLP-ICP				
Aluminum	mg/kg	7650 A/*	3970 A/*	5490 A/*
Antimony	mg/kg	10.4 J3	ND(6) J3/U	ND(6) J3/U
Barium	mg/kg	548 A/*	43.7 A/*	ND(20) A/U
Beryllium	mg/kg	ND(0.5) A/U	ND(0.5) A/U	ND(0.5) A/U
Cadmium	mg/kg	1 A	ND(0.5) A/U	ND(0.5) A/U
Calcium	mg/kg	5650 J2/*	14300 J2/*	1870 J2/*
Chromium	mg/kg	282 J23/*	44.7 J23/*	1190 J23/*
Cobalt	mg/kg	36 A/*	5.1 A/*	94.5 A/*
Copper	mg/kg	363 J2/N*	192 J2/N*	35.6 J2/N*
Iron	mg/kg	75300 A	13100 A	39800 A
Lead	mg/kg	1300 J3/N*	44.1 J3/N*	22.3 J3/N*
Magnesium	mg/kg	83300 J2/*	7200 J2/*	185000 J2/*
Manganese	mg/kg	699 J23/N	261 J23/N	765 J23/N
Nickel	mg/kg	733 J23/N*	51 J23/N*	1830 J23/N*
Potassium	mg/kg	1200 A	617 A	716 A
Silver	mg/kg	ND(1) J3/U	ND(1) J3/U	ND(1) J3/U
Sodium	mg/kg	3510 A	1970 A	3940 A
Vanadium	mg/kg	35.4 A	14.9 A	37.3 A
Zinc	mg/kg	1560 A	98.7 A	70.5 A
Molybdenum	mg/kg	ND(10) A/U	ND(10) A/U	ND(10) A/U
EPA-7196				
Chromium VI	ug/kg	ND(50) A	ND(50) A	ND(50) A
EPA-9045				
pH	pH	7.1 J5	7.8 J5	7.1 J5

Notes: Units expressed as milligrams (mg) of chemical per kilogram (kg) of soil.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Validation Assigned Qualifiers

- A: Data is acceptable based on a review of laboratory and field QC samples and holding times as discussed in the text.
- J2: Analytical results for this compound are qualified as estimated due to laboratory matrix duplicate quality control criteria exceedances.
- J3: Analytical results for this compound are qualified as estimated due to poor spike recoveries.
- J4: Analytical results for this compound are qualified as estimated due to ICP-serial dilution relative percent difference quality control criteria exceedances.
- J5: Analytical results for this compound are qualified as estimated due to holding time exceedances.
- J6: Analytical results for this compound are qualified as estimated due to field duplicate quality control criteria exceedances.
- R1: Analytical results for this compound are qualified as rejected due to holding time exceedances.
- R2: Analytical results for this compound are qualified as rejected due to poor spike recoveries.
- U1: Compound is qualified as non-detected due to its occurrence in the laboratory blanks.
- U2: Compound is qualified as non-detected due to its occurrence in the field blanks.
- V: Sample has undergone full CLP validation.

Laboratory Assigned Qualifiers

- B: Reported value is less than the CRDL and greater than or equal to the instrument detection limit.
- E: The serial dilution analysis did not meet the contractual requirement of +/- 10% (SOW 7/87 E-12)
- G: Reporting limit raised due to matrix interference.
- N: Spiked sample recovery not within control limits.
- O,R: Reporting limit raised due to high level of analyte present in sample.
- S: The reported value was determined by the Method of Standard Additions (MSA).
- U: Compound was analyzed but not detected.
- W: Post-digestion spike for furnace AA analysis is outside of control limits.
- *: Duplicate analysis not within control limits.
- +: Correlation coefficient for the MSA is less than 0.995.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW19A	IR07MW19A	IR07MW19A	IR07MW20A1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X005	9131X173	9131X174	9050X007
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/12/90	07/30/91	07/30/91	12/13/90
Lab Sample Number:	9012113-04A	0595990007SA	0595990008SA	9012124-01A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
1,1,1-Trichloroethane	ug/l	ND(5)	R1/U	ND(5)	A	ND(5)	A	ND(5)	R1/U
Vinyl acetate	ug/l	ND(10)	R1/U	ND(10)	A	ND(10)	A	ND(10)	R1/U
2-Hexanone	ug/l	ND(10)	R1/U	ND(10)	A	ND(10)	A	ND(10)	R1/U
Toluene	ug/l	ND(5)	R1/U	ND(5)	A	ND(5)	A	ND(5)	R1/U
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	R1/U	ND(5)	A	ND(5)	A	ND(5)	R1/U

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg)
 of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW20A1	IR07MW20A1	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9130X156	9130X157	9050X008	9050X009
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/25/91	07/25/91	12/13/90	12/13/90
Lab Sample Number:	0595330002SA	0595330003SA	9012124-04A	9012124-05A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
1,1,1-Trichloroethane	ug/l	ND(5)	A	ND(5)	A	ND(5)	R1/U	ND(5)	R1/U
Vinyl acetate	ug/l	ND(10)	A	ND(10)	A	ND(10)	R1/U	ND(10)	R1/U
2-Hexanone	ug/l	ND(10)	A	ND(10)	A	ND(10)	R1/U	ND(10)	R1/U
Toluene	ug/l	ND(5)	A	ND(5)	A	ND(5)	R1/U	ND(5)	R1/U
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	A	ND(5)	A	ND(5)	R1/U	ND(5)	R1/U

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
 Analytical Results for Organic Compounds Detected in Groundwater Samples
 Sub-Base Area, IR-7
 Hunters Point Annex

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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW21A1	IR07MW21A1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9131X168	9131X169	9050X004	9131X167
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/29/91	07/29/91	12/12/90	07/29/91
Lab Sample Number:	0595990002SA	0595990003SA	9012113-03A	0595990001SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
1,1,1-Trichloroethane	ug/l	ND(5) A	ND(5) A	ND(5) R1/U	ND(5) A
Vinyl acetate	ug/l	ND(10) A	ND(10) A	ND(10) R1/U	2 A/J
2-Hexanone	ug/l	ND(10) A	ND(10) A	ND(10) R1/U	4 A/J
Toluene	ug/l	ND(5) A	ND(5) A	ND(5) R1/U	ND(5) A
1,1,2,2-Tetrachloroethane	ug/l	ND(5) A	ND(5) A	ND(5) R1/U	1 A/J

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg)
 of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW23A	IR07MW23A
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X006	9130X155	9050X001	9050X002
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/13/90	07/25/91	12/12/90	12/12/90
Lab Sample Number:	9012125-01A	0595330001SA	9012113-01A	9012113-02A

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
1,1,1-Trichloroethane	ug/l	ND(5) R1/U	ND(5) A	ND(5) R1/U	ND(5) R1/U
Vinyl acetate	ug/l	ND(10) R1/U	ND(10) A	ND(10) R1/U	ND(10) R1/U
2-Hexanone	ug/l	ND(10) R1/U	ND(10) A	ND(10) R1/U	ND(10) R1/U
Toluene	ug/l	ND(5) R1/U	ND(5) A	ND(5) R1/U	ND(5) R1/U
1,1,2,2-Tetrachloroethane	ug/l	ND(5) R1/U	ND(5) A	ND(5) R1/U	ND(5) R1/U

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg)
of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	IR07MW23A	IR07MW23A	P-1	P-1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9130X161	9130X162	9051X022	9131X176
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/26/91	07/26/91	12/18/90	07/30/91
Lab Sample Number:	0595330007SA	0595330008SA	9012177-03A	0595990010SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-VOC					
1,1,1-Trichloroethane	ug/l	ND(5) A	ND(5) A	ND(5) R1/U	ND(5) A
Vinyl acetate	ug/l	ND(10) A	ND(10) A	ND(10) R1/U	ND(10) A
2-Hexanone	ug/l	ND(10) A	ND(10) A	ND(10) R1/U	ND(10) A
Toluene	ug/l	ND(5) A	ND(5) A	1 J5F/J	ND(5) A
1,1,2,2-Tetrachloroethane	ug/l	ND(5) A	ND(5) A	ND(5) R1/U	ND(5) A

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg)
of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	P-2	P-2	S-1	S-1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9051X018	9131X177	9050X013	9131X170
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/17/90	07/30/91	12/14/90	07/29/91
Lab Sample Number:	9012176-04A	0595990011SA	9012125-05A	0595990004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
1,1,1-Trichloroethane	ug/l	ND(5)	R1J3/U	ND(5)	A	ND(5)	R1/U	ND(5)	A
Vinyl acetate	ug/l	ND(10)	R1J3/U	ND(10)	A	ND(10)	R1/U	ND(10)	A
2-Hexanone	ug/l	ND(10)	R1J3/U	ND(10)	A	ND(10)	R1/U	ND(10)	A
Toluene	ug/l	ND(5)	R1J3/U	ND(5)	A	ND(5)	R1/U	ND(5)	A
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	R1J3/U	ND(5)	A	ND(5)	R1/U	ND(5)	A

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	S-2	S-2	S-2	S-3
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9051X016	9051X017	9130X165	9050X011
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/17/90	12/17/90	07/26/91	12/14/90
Lab Sample Number:	9012176-02A	9012176-03A	0595330011SA	9012125-03A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
1,1,1-Trichloroethane	ug/l	ND(5)	R1/U	ND(5)	R1/U	ND(5)	A	ND(5)	R1/U
Vinyl acetate	ug/l	ND(10)	R1/U	ND(10)	R1/U	ND(10)	A	ND(10)	R1/U
2-Hexanone	ug/l	ND(10)	R1/U	ND(10)	R1/U	ND(10)	A	ND(10)	R1/U
Toluene	ug/l	ND(5)	R1/U	ND(5)	R1/U	ND(5)	A	ND(5)	R1/U
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	R1/U	ND(5)	R1/U	ND(5)	A	ND(5)	R1/U

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	S-3	S-3	S-4	S-4
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X012	9130X163	9051X020	9051X021
Matrix:	H2O	H2O	H2O	H2O
Sample Date:	12/14/90	07/26/91	12/18/90	12/18/90
Lab Sample Number:	9012125-04A	0595330009SA	9012177-01A	9012177-02A

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-VOC									
1,1,1-Trichloroethane	ug/l	ND(5)	R1J3/U	ND(5)	A	1	J5/J	ND(5)	R1/U
Vinyl acetate	ug/l	ND(10)	R1J3/U	ND(10)	A	ND(10)	R1/U	ND(10)	R1/U
2-Hexanone	ug/l	ND(10)	R1J3/U	ND(10)	A	ND(10)	R1/U	ND(10)	R1/U
Toluene	ug/l	ND(5)	R1J3/U	ND(5)	A	ND(5)	R1/U	ND(5)	R1/U
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	R1J3/U	ND(5)	A	ND(5)	R1/U	ND(5)	R1/U

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Table E-3
Analytical Results for Organic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number: S-4
Sample Depth(feet): 0.00
Sample Number: 9130X159
Matrix: H₂O
Sample Date: 07/25/91
Lab Sample Number: 0595330005SA

Test Method/Analyte Name	Units	value	qual
CLP-VOC			
1,1,1-Trichloroethane	ug/l	ND(5)	A
Vinyl acetate	ug/l	ND(10)	A
2-Hexanone	ug/l	ND(10)	A
Toluene	ug/l	ND(5)	A
1,1,2,2-Tetrachloroethane	ug/l	ND(5)	A

Notes: Units expressed as nanograms (ng), micrograms (ug), or milligrams (mg)
of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific reporting limit. Reporting limit is included in parenthesis.

Validation Assigned Qualifiers

- A: Data is acceptable based on a review of laboratory and field QC samples and holding times as discussed in the text.
- F: The presence of this compound is due to suspected field contamination.
- J3: Analytical results for this compound are qualified as estimated due to poor spike recoveries.
- J5: Analytical results for this compound are qualified as estimated due to holding time exceedances.
- J7: Analytical results for this compound are qualified as estimated due to linearity problems in the initial calibration.
- J8: Analytical results for this compound are qualified as estimated due to detection of the compound above the instrument calibration range.
- R1: Analytical results for this compound are qualified as rejected due to holding time exceedances.
- R2: Analytical results for this compound are qualified as rejected due to poor spike recoveries.
- U1: Compound is qualified as non-detected due to its occurrence in the laboratory blanks.
- U2: Compound is qualified as non-detected due to its occurrence in the field blanks.
- V: Sample has undergone full CLP validation.

Laboratory Assigned Qualifiers

- B: Compound is also detected in the laboratory method blank.
- #,b: Analytical results should not be considered reliable for this common lab contaminant.
- D: Compound is identified in an analysis at a secondary dilution factor.
- E: Concentration exceeds the calibration range of the GC/MS instrument for the specific analysis.
- G: Reporting limit raised due to matrix interference.
- J: Result is detected below the reporting limit or is an estimated concentration.
- j: All reporting limits for this sample raised due to matrix interferences.
- l: If 'l' is attached to a diesel result, then either the hydrocarbons present in this sample represent an unknown mixture at a concentration of less than 45 mg/kg, or the hydrocarbons present in this sample do not fit the diesel pattern, but are found in the diesel range. (Quantification was based upon diesel references.) If 'l' is attached to a gasoline result, then this sample contains late eluting hydrocarbons. Early gasoline peaks are below reporting limits.
- o: Reporting limit raised due to high level of analyte present in sample.

Laboratory Assigned Qualifiers (Continued...)

r: Reporting limit changed due to sample volume limitations.

U: Compound was analyzed but not detected.

X,Y: Specific flag used to properly define the results. Qualifier is fully described in the Sample Data Summary Package and the Case Narrative.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	IR07MW19A	IR07MW19A	IR07MW19A	IR07MW20A1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X005	9131X173	9131X174	9050X007
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/12/90	07/30/91	07/30/91	12/13/90
Lab Sample Number:	9012113-04D	0595990007SA	0595990008SA	9012124-01D

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	ND(30) A/WU	ND(2.5) A/W	ND(2.5) A/W	ND(15) J3/NWU
Lead	ug/l	115 J3/S	ND(1.2) J3/NW	ND(12) J3/NW	ND(10) A/U
Thallium	ug/l	ND(3) A/WU	ND(1.5) J3/NW	ND(15) J3/NW	ND(3) J3/NWU
CLP-ICP					
Aluminum	ug/l	530 A	ND(25.7) A	ND(25.7) A	426 J3/N
Antimony	ug/l	58.6 J3/B	ND(17.4) U1/B	ND(27) U1/B	ND(35) A/U
Barium	ug/l	120 A/B	89.4 A/BE	88.3 A/BE	70.7 A/B
Beryllium	ug/l	ND(3) A/U	ND(0.95) U1/B	ND(1.3) U1/B	ND(1) J3/U
Cadmium	ug/l	ND(3) A/U	ND(3.4) A	ND(3.4) A	ND(2) J3/U
Calcium	ug/l	352450 A	289000 A/E	292000 A/E	255000 A
Chromium	ug/l	ND(6) A/U	ND(2.1) A	ND(2.1) A	ND(4) A/U
Cobalt	ug/l	ND(17) A/U	ND(4.9) A	ND(4.9) A	ND(17) J3/U
Copper	ug/l	ND(8) A/U	ND(4.2) U1	ND(4.2) U1/B	ND(5) J3/U
Iron	ug/l	ND(15) A/U	ND(11.9) A	ND(11.9) A	ND(14) J3/NU
Magnesium	ug/l	964650 A	959000 A/E	967000 A/E	739300 A
Manganese	ug/l	361 A	14.6 A/BE	8 A/BE	1710 A
Nickel	ug/l	43.4 A/B	27.6 A/B	25.9 A/B	66.5 J3
Potassium	ug/l	287800 A	321000 A	325000 A	221300 A
Silver	ug/l	ND(4) A/U	ND(1.7) A	ND(1.7) A/B	ND(6.3) U1J3/B
Sodium	ug/l	8142200 A	8570000 A	8590000 A/B	5967000 A
Vanadium	ug/l	ND(5) A/U	ND(1.6) A	ND(1.6) A/B	ND(5) A/U
Zinc	ug/l	17 J2/B*	ND(8.8) U1/B	ND(7.3) U1/B	ND(12) U1/B*
Molybdenum	ug/l	25.4 A	ND(7.8) U1/BN	ND(7) U1/N	ND(17) A/U
EPA-300.0					
Sulfate	mg/l	1390 A	NA	NA	2510 A
Chloride	mg/l	11770 A	NA	NA	16300 A
Orthophosphate as P	mg/l	ND(4.41) A/U	NA	NA	0.098 A
EPA-353.1					
Nitrate as N	mg/l	NA	NA	NA	ND(0.6) A
EPA-9045					
pH	pH	7.4 J5	6.9 A	7 A	7.1 J5

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW20A1	IR07MW20A1	IR07MW20A2	IR07MW20A2
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9130X156	9130X157	9050X008	9050X009
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/25/91	07/25/91	12/13/90	12/13/90
Lab Sample Number:	0595330002SA	0595330003SA	9012124-04D	9012124-05D

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	ND(2.5) A/W	ND(2.5) A/W	ND(15) J3/NWU	ND(15) J3/NU
Lead	ug/l	ND(12) J3/N	ND(12) J3/N	20.9 A	ND(10) A/WU
Thallium	ug/l	ND(30) R2/EN	ND(30) R2/EN	ND(3) J3/NU	ND(3) J3/WU
CLP-ICP					
Aluminum	ug/l	ND(650) U2	ND(1980) U2	332 J3/N	371 J3/N
Antimony	ug/l	ND(14.3) A	ND(22) U1/B	ND(35) A/U	ND(35) A/U
Barium	ug/l	60.9 A/BE	81.7 A/BE	583 A	655 A
Beryllium	ug/l	ND(0.3) U1/B	ND(1.6) U1/B	4 J3/B	ND(1) J3/U
Cadmium	ug/l	ND(3.4) A	ND(3.4) A	ND(2) J3/U	ND(2) J3/U
Calcium	ug/l	289000 A/E	298000 A/E	277000 A	275000 A
Chromium	ug/l	5.8 A/B	11.5 A	10.2 A	ND(4) A/U
Cobalt	ug/l	6.4 A/B	13.7 A/B	22.2 J3/B	23.4 J3/B
Copper	ug/l	ND(8) U1/B	ND(11.3) U1/B	43.7 J3	52.6 J3
Iron	ug/l	1260 A/E	3590 A/E	ND(14) J3/NU	23 J3/BN
Magnesium	ug/l	983000 A	994000 A	1111200 A	1080000 A
Manganese	ug/l	124 A/E	262 A/E	2803 A	3670 A
Nickel	ug/l	59.1 A	117 A	126 J3	119 J3
Potassium	ug/l	366000 A	363000 A	17040 A	24000 A
Silver	ug/l	ND(1.7) A	ND(1.7) A	ND(4) J3/U	ND(7.1) U1J3/B
Sodium	ug/l	8630000 A	8600000 A	1310000 A	1810000 A
Vanadium	ug/l	ND(1.6) A	ND(2.2) U1/B	ND(5) A/U	ND(5) A/U
Zinc	ug/l	ND(6.9) U2/B	ND(7) U2/B	ND(19) U1/B*	ND(24) U1/*
Molybdenum	ug/l	ND(7.2) U1J3/BN	ND(4) U1J3/BN	ND(17) A/U	22.3 A
EPA-300.0					
Sulfate	mg/l	NA	NA	262 A	232 A
Chloride	mg/l	NA	NA	7820 A	6540 A
Orthophosphate as P	mg/l	NA	NA	0.18 A	0.19 A
EPA-353.1					
Nitrate as N	mg/l	NA	NA	ND(0.6) A	ND(0.6) A
EPA-9045					
pH	pH	7.4 A	7.4 A	7.15 J5	7.25 J5

Notes: Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	IR07MW20A2	IR07MW20A2	IR07MW21A1	IR07MW21A1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9131X168	9131X169	9050X004	9131X167
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/29/91	07/29/91	12/12/90	07/29/91
Lab Sample Number:	0595990002SA	0595990003SA	9012113-03D	0595990001SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	4.1 A/BW	3.3 A/B	ND(3) A/U	ND(2.5) A/W
Lead	ug/l	ND(1.2) J3/NW	ND(1.2) J3/NW	2.6 J3	ND(1.2) J3/N
Thallium	ug/l	ND(1.5) J3/NW	ND(1.5) J3/NW	ND(3) A/U	ND(1.5) J3/NW
CLP-ICP					
Aluminum	ug/l	ND(25.7) A	ND(25.7) A	274 A	ND(25.7) A
Antimony	ug/l	ND(28.6) U1/B	14.3 A/B	ND(46) A/U	ND(23.9) U1/B
Barium	ug/l	721 A/E	690 A/E	78.3 A/B	91.6 A/BE
Beryllium	ug/l	ND(0.63) U1/B	ND(1.3) U1/B	ND(3) A/U	ND(0.32) U1/B
Cadmium	ug/l	ND(3.4) A	ND(3.4) A	ND(3) A/U	ND(3.4) A
Calcium	ug/l	278000 A/E	273000 A/E	110550 A	99300 A/E
Chromium	ug/l	ND(2.1) A	ND(2.1) A	ND(6) A/U	ND(2.1) A
Cobalt	ug/l	21.9 A/B	22.5 A/B	ND(17) A/U	ND(4.9) A
Copper	ug/l	35.1 A	46.1 A/B	ND(8) A/U	ND(3.4) U1/B
Iron	ug/l	ND(11.9) A	ND(11.9) A	24 A/B	ND(28.9) U1/B
Magnesium	ug/l	1330000 A/E	1260000 A/E	166750 A	161000 A/E
Manganese	ug/l	4510 A/E	4390 A/E	654 A	891 A/E
Nickel	ug/l	91.1 A	106 A	39.2 A/B	18 A/B
Potassium	ug/l	26300 A	25500 A	20040 A	19000 A
Silver	ug/l	ND(1.7) A	ND(1.7) A	ND(4) A/U	ND(1.7) A
Sodium	ug/l	2060000 A	1950000 A	324920 A	302000 A
Vanadium	ug/l	ND(1.6) A	ND(1.6) A	ND(5) A/U	ND(3.3) U1/B
Zinc	ug/l	ND(1.6) A	ND(9.2) U1/B	18 J2/B*	13.2 A/B
Molybdenum	ug/l	ND(3.3) A/N	ND(3.3) A/N	ND(18) A/U	ND(5.5) U1/BN
EPA-300.0					
Sulfate	mg/l	NA	NA	80.8 A	NA
Chloride	mg/l	NA	NA	692 A	NA
Orthophosphate as P	mg/l	NA	NA	ND(4.41) A/U	NA
EPA-353.1					
Nitrate as N	mg/l	NA	NA	NA	NA
EPA-9045					
pH	pH	7.1 A	7.1 A	7.45 J5	7.3 A

Notes: Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW21A2	IR07MW21A2	IR07MW23A	IR07MW23A
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X006	9130X155	9050X001	9050X002
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/13/90	07/25/91	12/12/90	12/12/90
Lab Sample Number:	9012125-01D	0595330001SA	9012113-01D	9012113-02D

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-FUAA									
Arsenic	ug/l	ND(3)	J3/NWU	ND(2.5)	A	ND(3)	A/U	ND(3)	A/U
Lead	ug/l	15.1	A	ND(6)	J3/N	ND(1)	A/U	ND(1)	A/WU
Thallium	ug/l	3.1	J3/W	ND(15)	R2/NW	ND(3)	A/U	ND(3)	A/U
CLP-ICP									
Aluminum	ug/l	544	J3	ND(25.7)	A	210	A	252	A
Antimony	ug/l	ND(35)	A/U	ND(14.3)	A	ND(46)	A/U	ND(46)	A/U
Barium	ug/l	413	A	1030	A/E	70.1	A/B	69.7	A/B
Beryllium	ug/l	ND(1)	J3/U	ND(1.3)	U1/B	ND(3)	A/U	ND(3)	A/U
Cadmium	ug/l	ND(2)	J3/U	ND(3.4)	A	3.5	A/B	ND(3)	A/U
Calcium	ug/l	394000	A	376000	A/E	94180	A	93960	A
Chromium	ug/l	5.7	A/B	ND(2.1)	A	ND(6)	A/U	ND(6)	A/U
Cobalt	ug/l	17.5	J3/B	12.1	A/B	ND(17)	A/U	ND(17)	A/U
Copper	ug/l	ND(5)	J3/U	ND(6.7)	U1/B	ND(8)	A/U	ND(8)	A/U
Iron	ug/l	77	J3/BN	ND(49.9)	U1/BE	79	A/B	110	A
Magnesium	ug/l	690000	A	676000	A	99860	A	101480	A
Manganese	ug/l	5310	A	6.2	A/BE	1638	A	1646	A
Nickel	ug/l	59.3	J3	50.4	A	61.4	A	48.1	A/B
Potassium	ug/l	68000	A	68000	A	13730	A	13760	A
Silver	ug/l	ND(4)	J3/U	ND(1.7)	A	ND(4)	A/U	ND(4)	A/U
Sodium	ug/l	3427000	A	3560000	A	163400	A	167480	A
Vanadium	ug/l	ND(5)	A/U	ND(5.2)	U1/B	ND(5)	A/U	ND(5)	A/U
Zinc	ug/l	9	A/B*	ND(4.3)	U2/B	19	J2/B*	13	J2/B*
Molybdenum	ug/l	ND(17)	A/U	ND(6.2)	U1J3/BN	ND(18)	A/U	ND(18)	A/U
EPA-300.0									
Sulfate	mg/l	508	A	NA		35	A	43.9	A
Chloride	mg/l	9090	A	NA		280	A	219	A
Orthophosphate as P	mg/l	0.025	A	NA		ND(4.41)	A/U	ND(4.41)	A/U
EPA-353.1									
Nitrate as N	mg/l	ND(0.6)	A	NA		NA		NA	
EPA-9045									
pH	pH	7.3	J5	7.5	A	7.25	J5	7.35	J5

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	IR07MW23A	IR07MW23A	P-1	P-1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9130X161	9130X162	9051X022	9131X176
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	07/26/91	07/26/91	12/18/90	07/30/91
Lab Sample Number:	0595330007SA	0595330008SA	9012177-03D	0595990010SA

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	ND(2.5) A	ND(2.5) A	ND(15) J3/U	ND(2.5) A/W
Lead	ug/l	ND(1.2) J3/N	ND(1.2) J3/N	24.6 A/NW	ND(1.2) J3/NW
Thallium	ug/l	ND(15) R2/NW	ND(15) R2/NW	ND(3) J3/NWU	ND(15) J3/EN
CLP-ICP					
Aluminum	ug/l	ND(25.7) A	ND(25.7) A	591 J3/N	ND(25.7) A
Antimony	ug/l	ND(14.3) A	ND(14.3) A	ND(35) A/U	ND(14.3) A
Barium	ug/l	83.2 A/BE	83.8 A/BE	77.7 A/B	70.1 A/BE
Beryllium	ug/l	ND(0.3) U1/B	ND(0.3) U1/B	ND(1) J3/U	ND(1.6) U1/B
Cadmium	ug/l	ND(3.4) A	ND(3.4) A	3.9 J3/B	ND(3.4) A/B
Calcium	ug/l	97100 A/E	96100 A/E	447200 A	352000 A/E
Chromium	ug/l	ND(2.1) A	ND(2.1) A	10.3 A	1260 A
Cobalt	ug/l	8.4 A/B	6.1 A/B	20.8 J3/B	161 A
Copper	ug/l	ND(2.4) U1/B	ND(1.6) U1/B	ND(5) J3/U	ND(4) U1/B
Iron	ug/l	230 A/E	208 A/E	709 J3	50500 A
Magnesium	ug/l	112000 A	112000 A	1587400 A	1510000 A/E
Manganese	ug/l	2350 A/E	2340 A/E	1624 J2/*	2590 A/E
Nickel	ug/l	40.5 A	46.9 A	485 J3	7120 A
Potassium	ug/l	13100 A	13000 A	11538 A/*	18300 A
Silver	ug/l	ND(1.7) A	ND(1.7) A	10.8 J3/B	ND(1.7) A
Sodium	ug/l	152000 A	151000 A	5204000 A	6150000 A
Vanadium	ug/l	ND(8.3) U1/B	ND(7) U1/B	12 A/B*	ND(1.6) A
Zinc	ug/l	9.1 A/B	7.1 A/B	ND(15) U2/B*	29.3 A
Molybdenum	ug/l	ND(3.3) A/N	ND(3.3) A/N	36.5 A	ND(5.1) U1/BN
EPA-300.0					
Sulfate	mg/l	NA	NA	1930 A	NA
Chloride	mg/l	NA	NA	14700 A	NA
Orthophosphate as P	mg/l	NA	NA	0.51 A	NA
EPA-353.1					
Nitrate as N	mg/l	NA	NA	0.59 A	NA
EPA-9045					
pH	pH	7.3 A	7.3 A	7.1 J5	7 A

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
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Station Number:	P-2	P-2	S-1	S-1
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9051X018	9131X177	9050X013	9131X170
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/17/90	07/30/91	12/14/90	07/29/91
Lab Sample Number:	9012176-04D	0595990011SA	9012125-05D	0595990004SA

Test Method/Analyte Name	Units	value	qual	value	qual	value	qual	value	qual
CLP-FUAA									
Arsenic	ug/l	ND(15)	J3/U	ND(2.5)	A/W	ND(15)	J3/NWU	ND(2.5)	A
Lead	ug/l	ND(2.9)	U2/N	ND(1.2)	J3/NW	ND(10)	A/U	2.1	J3/BNW
Thallium	ug/l	ND(3)	J3/NU	ND(15)	J3/NW	ND(3)	J3/WU	ND(1.5)	J3/NW
CLP-ICP									
Aluminum	ug/l	589	J3/N	ND(25.7)	A	103	J3/B	ND(25.7)	A
Antimony	ug/l	ND(35)	A/NU	ND(27.1)	U1/B	ND(35)	A/U	ND(31.9)	U1/B
Barium	ug/l	ND(26)	A/U	30.9	A/BE	379	A	395	A/E
Beryllium	ug/l	ND(1)	J3/U	ND(1.3)	U1/B	ND(1)	J3/U	ND(0.24)	A
Cadmium	ug/l	ND(2)	J3/U	ND(3.4)	A	ND(2)	J3/U	ND(3.4)	A
Calcium	ug/l	255350	A	310000	A/E	72000	A	69500	A/E
Chromium	ug/l	ND(4)	A/U	ND(2.1)	A	ND(4)	A/U	ND(2.1)	A
Cobalt	ug/l	ND(17)	J3/U	33.8	A/B	ND(17)	J3/U	14.4	A/B
Copper	ug/l	ND(5)	J3/U	ND(4.3)	U1/B	ND(5)	J3/U	ND(1.3)	A
Iron	ug/l	87	J3/B	198	A	ND(14)	J3/NU	ND(47.4)	U1/B
Magnesium	ug/l	811150	A	1260000	A/E	443000	A	395000	A/E
Manganese	ug/l	681	J2/N*	868	A/E	2010	A	2460	A/E
Nickel	ug/l	336	J3	651	A	229	J3	282	A
Potassium	ug/l	249800	A/*	390000	A	4673	A	4990	A/B
Silver	ug/l	7.6	J3/B	ND(1.7)	A	ND(6)	U1J3/B	ND(1.7)	A
Sodium	ug/l	6364200	A	9860000	A	1078000	A	917000	A
Vanadium	ug/l	6	A/B*	ND(1.6)	A	ND(5)	A/U	ND(1.6)	A
Zinc	ug/l	ND(8)	U2/B*	ND(2.5)	U1/B	ND(6)	U1/B*	ND(1.6)	A
Molybdenum	ug/l	ND(17)	A/U	ND(11.8)	U1/BN	ND(17)	A/U	ND(5.5)	U1/BN
EPA-300.0									
Sulfate	mg/l	2120	A	NA		382	A	NA	
Chloride	mg/l	17000	A	NA		2700	A	NA	
Orthophosphate as P	mg/l	1.7	A	NA		0.85	A	NA	
EPA-353.1									
Nitrate as N	mg/l	0.71	A	NA		ND(0.6)	A	NA	
EPA-9045									
pH	pH	7.65	J5	6.9	A	7.4	J5	7.3	A

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	S-2	S-2	S-2	S-3
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9051X016	9051X017	9130X165	9050X011
Matrix:	H ₂ O	H ₂ O	H ₂ O	H ₂ O
Sample Date:	12/17/90	12/17/90	07/26/91	12/14/90
Lab Sample Number:	9012176-02D	9012176-03D	0595330011SA	9012125-03D

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	ND(3) J3/U	3.4 J3/BW	4.6 A/B	ND(15) J3/NWU
Lead	ug/l	ND(1.5) U2/BNW	ND(2.8) U2/BNW	ND(1.2) J3/NW	13.4 A
Thallium	ug/l	ND(3) J3/NWU	ND(3) J3/NWU	ND(15) R2/NW	ND(3) J3/WU
CLP-ICP					
Aluminum	ug/l	738 J3/N	705 J3/N	ND(25.7) A	430 J3
Antimony	ug/l	ND(35) A/U	ND(35) A/U	ND(23.6) U1/B	ND(35) A/U
Barium	ug/l	167 A/B	203 A	331 A/E	369 A
Beryllium	ug/l	ND(1) J3/U	ND(1) J3/U	ND(0.3) U1/B	ND(1) J3/U
Cadmium	ug/l	ND(2) J3/U	ND(2) J3/U	ND(3.4) A	ND(2) J3/U
Calcium	ug/l	481500 A	417500 A	352000 A/E	284000 A
Chromium	ug/l	5.2 A/B	5.1 A/B	ND(2.1) A	13.3 A
Cobalt	ug/l	ND(17) J3/U	ND(17) J3/U	18 A/B	21.8 J3/B
Copper	ug/l	ND(5) J3/U	ND(5) J3/U	ND(1.3) A	6 J3/B
Iron	ug/l	850 J3	292 J3	1810 A/E	852 J3/N
Magnesium	ug/l	1014200 A	847100 A	698000 A	1147000 A
Manganese	ug/l	3025 J2/*	2615 J2/*	4050 A/E	5640 A
Nickel	ug/l	164 J3	157 J3	153 A	425 J3
Potassium	ug/l	28175 A/*	24025 A/*	17000 A	126000 A
Silver	ug/l	ND(4) J3/U	ND(4) J3/U	ND(1.7) A	ND(18.9) U1J3
Sodium	ug/l	1495200 A	1321100 A	992000 A	4949000 A
Vanadium	ug/l	5 A/B*	5 A/B*	ND(5.2) U1/B	ND(5) A/U
Zinc	ug/l	ND(11) U2/*	ND(10) U2/B*	ND(1.6) A	ND(9) U1/B*
Molybdenum	ug/l	34.7 A	31.6 A	ND(15) U1J3/BN	23.5 A
EPA-300.0					
Sulfate	mg/l	1010 A	1010 A	NA	1080 A
Chloride	mg/l	5120 A	5580 A	NA	13600 A
Orthophosphate as P	mg/l	3.3 A	4.5 A	NA	3.3 A
EPA-353.1					
Nitrate as N	mg/l	ND(0.03) A	ND(0.03) A	NA	ND(0.6) A
EPA-9045					
pH	pH	7.5 J5	7.55 J5	7.3 A	7.3 J5

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

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Station Number:	S-3	S-3	S-4	S-4
Sample Depth(feet):	0.00	0.00	0.00	0.00
Sample Number:	9050X012	9130X163	9051X020	9051X021
Matrix:	H2O	H2O	H2O	H2O
Sample Date:	12/14/90	07/26/91	12/18/90	12/18/90
Lab Sample Number:	9012125-04D	0595330009SA	9012177-01D	9012177-02D

Test Method/Analyte Name	Units	value qual	value qual	value qual	value qual
CLP-FUAA					
Arsenic	ug/l	ND(15) J3/NWU	ND(2.5) A	ND(15) J3/U	ND(15) J3/WU
Lead	ug/l	ND(10) A/WU	ND(1.2) J3/NW	49.9 A	44.3 A
Thallium	ug/l	ND(3) J3/WU	ND(30) R2/NW	ND(3) J3/WU	ND(3) J3/WU
CLP-ICP					
Aluminum	ug/l	424 J3	180 A/B	459 J3	270 J3
Antimony	ug/l	48 A/B	ND(14.3) A	ND(35) A/U	ND(35) A/U
Barium	ug/l	328 A	1040 A/E	71.1 A/B	45.1 A/B
Beryllium	ug/l	ND(1) J3/U	ND(1.1) U1	ND(1) J3/U	ND(1) J3/U
Cadmium	ug/l	ND(2) J3/U	ND(3.4) A	2.9 J3/B	ND(2) J3/U
Calcium	ug/l	380000 A	297000 A/E	341100 A	313200 A
Chromium	ug/l	ND(4) A/U	23.5 A	15.7 A	7.7 A/B
Cobalt	ug/l	ND(17) J3/U	20 A/B	31.9 J3/B	42.7 J3/B
Copper	ug/l	8.8 J3/B	ND(4.5) U1/B	11.1 J3/B	ND(5) J3/U
Iron	ug/l	638 J3/N	1510 A/E	1511 J3	1033 J3
Magnesium	ug/l	1355000 A	1410000 A	914300 A	830000 A
Manganese	ug/l	5620 A	7470 A/E	1816 J2	1692 J2
Nickel	ug/l	446 J3	263 A	532 J3	625 J3
Potassium	ug/l	111000 A	75800 A	249600 A	236600 A
Silver	ug/l	ND(19.4) U1J3	ND(1.7) A	25.1 J3	14.7 J3/B
Sodium	ug/l	6202000 A	4490000 A	6459800 A	6300000 A
Vanadium	ug/l	ND(5) A/U	ND(1.6) A	5 A/B	19 A/B
Zinc	ug/l	ND(8) U1/B*	ND(1.6) A	ND(10) U2/B	ND(10) U2/B
Molybdenum	ug/l	ND(17) A/U	ND(3.3) A/N	77.5 A	103 A
EPA-300.0					
Sulfate	mg/l	940 A	NA	1670 A	1750 A
Chloride	mg/l	14900 A	NA	14500 A	13200 A
Orthophosphate as P	mg/l	2.6 A	NA	1.4 A	0.93 A
EPA-353.1					
Nitrate as N	mg/l	ND(0.6) A	NA	0.084 A	0.081 A
EPA-9045					
pH	pH	7.5 J5	7.2 A	7.15 J5	7 J5

Notes:

Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

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Table E-4
Analytical Results for Inorganic Compounds Detected in Groundwater Samples
Sub-Base Area, IR-7
Hunters Point Annex

Station Number: S-4
 Sample Depth(feet): 0.00
 Sample Number: 9130X159
 Matrix: H₂O
 Sample Date: 07/25/91
 Lab Sample Number: 0595330005SA

Test Method/Analyte Name	Units	value	qual
CLP-FUAA			
Arsenic	ug/l	ND(2.5)	A
Lead	ug/l	ND(6)	J3/N
Thallium	ug/l	ND(30)	R2/EN
CLP-ICP			
Aluminum	ug/l	ND(25.7)	A
Antimony	ug/l	ND(14.3)	A
Barium	ug/l	92.4	A/BE
Beryllium	ug/l	ND(1.3)	U1/B
Cadmium	ug/l	ND(3.4)	A
Calcium	ug/l	268000	A/E
Chromium	ug/l	2.9	A/B
Cobalt	ug/l	17.3	A/B
Copper	ug/l	ND(9.5)	U1/B
Iron	ug/l	432	A/E
Magnesium	ug/l	803000	A
Manganese	ug/l	982	A/E
Nickel	ug/l	361	A
Potassium	ug/l	257000	A
Silver	ug/l	ND(1.7)	A
Sodium	ug/l	6410000	A
Vanadium	ug/l	ND(1.6)	A
Zinc	ug/l	ND(15.4)	U2/B
Molybdenum	ug/l	ND(12.4)	U1J3/N
EPA-300.0			
Sulfate	mg/l	NA	
Chloride	mg/l	NA	
Orthophosphate as P	mg/l	NA	
EPA-353.1			
Nitrate as N	mg/l	NA	
EPA-9045			
pH	pH	7.2	A

Notes: Units expressed as nanograms (ng), micrograms (ug), milligrams (mg), picoCuries (pCi) or million structures (ms) of chemical per liter (l) of water.

NA: Not Analyzed.

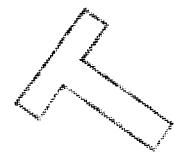
ND(): Not Detected at a specific detection limit. Limit of detection is included in parenthesis.

Validation Assigned Qualifiers

- A: Data is acceptable based on a review of laboratory and field QC samples and holding times as discussed in the text.
- J2: Analytical results for this compound are qualified as estimated due to laboratory matrix duplicate quality control criteria exceedances.
- J3: Analytical results for this compound are qualified as estimated due to poor spike recoveries.
- J4: Analytical results for this compound are qualified as estimated due to ICP-serial dilution relative percent difference quality control criteria exceedances.
- J5: Analytical results for this compound are qualified as estimated due to holding time exceedances.
- J6: Analytical results for this compound are qualified as estimated due to field duplicate quality control criteria exceedances.
- R1: Analytical results for this compound are qualified as rejected due to holding time exceedances.
- R2: Analytical results for this compound are qualified as rejected due to poor spike recoveries.
- U1: Compound is qualified as non-detected due to its occurrence in the laboratory blanks.
- U2: Compound is qualified as non-detected due to its occurrence in the field blanks.
- V: Sample has undergone full CLP validation.

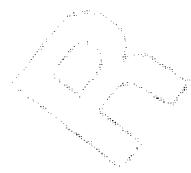
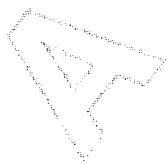
Laboratory Assigned Qualifiers

- B: Reported value is less than the CRDL and greater than or equal to the instrument detection limit.
- E: The serial dilution analysis did not meet the contractual requirement of +/- 10% (SOW 7/87 E-12)
- G: Reporting limit raised due to matrix interference.
- N: Spiked sample recovery not within control limits.
- O,R: Reporting limit raised due to high level of analyte present in sample.
- S: The reported value was determined by the Method of Standard Additions (MSA).
- U: Compound was analyzed but not detected.
- W: Post-digestion spike for furnace AA analysis is outside of control limits.
- *: Duplicate analysis not within control limits.
- +: Correlation coefficient for the MSA is less than 0.995.



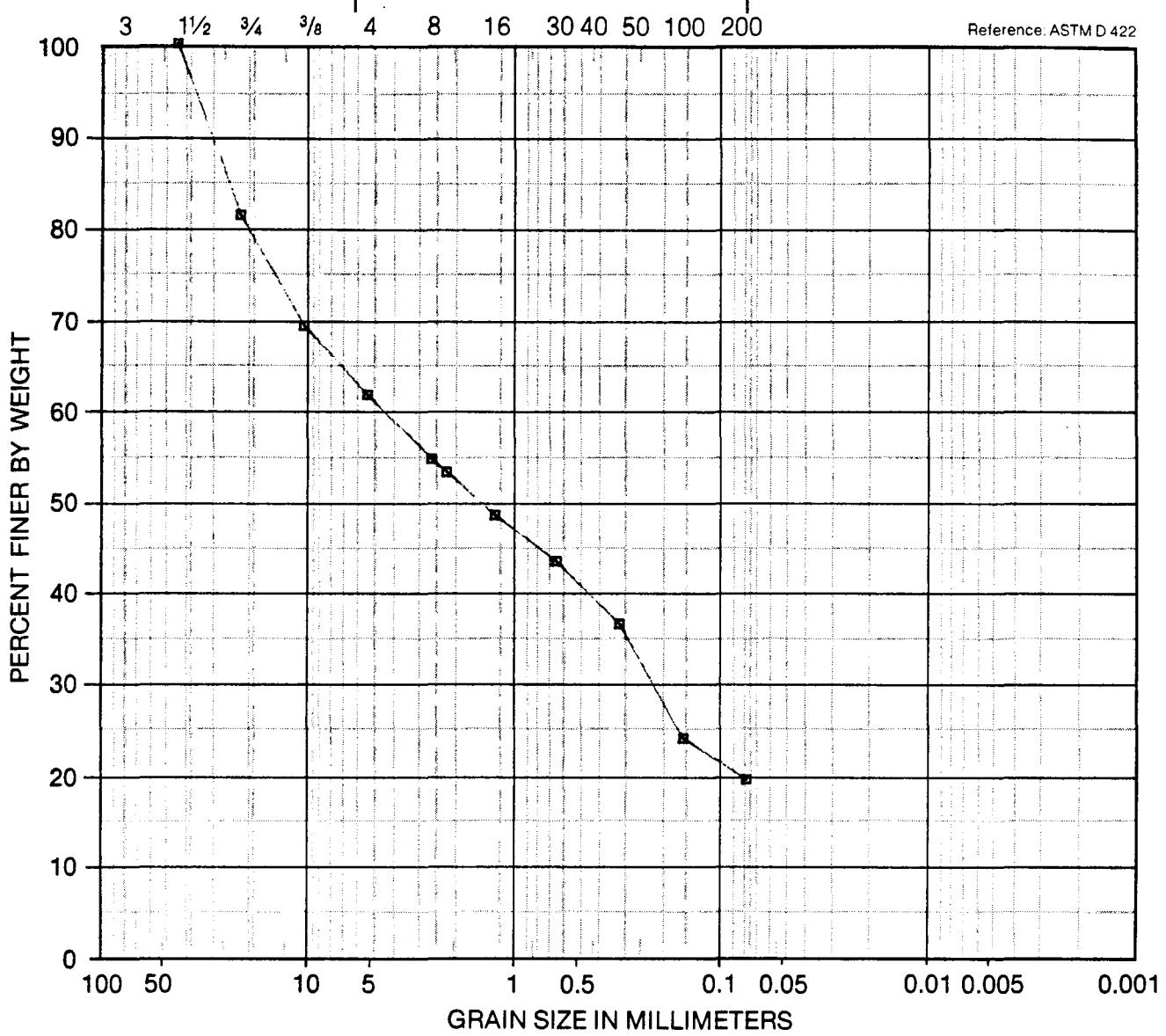
Appendix F

PHYSICAL TESTING RESULTS



U.S. Standard Sieve Size (in.) → U.S. Standard Sieve Numbers ← Hydrometer

Reference: ASTM D 422



COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT OR CLAY
	GRAVEL			SAND		

Symbol	Sample Source	Classification
■	B025 @ 6.5 FT	BROWN SILTY SAND W/GRAVEL (SM)



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Primary Phase Remedial Investigation

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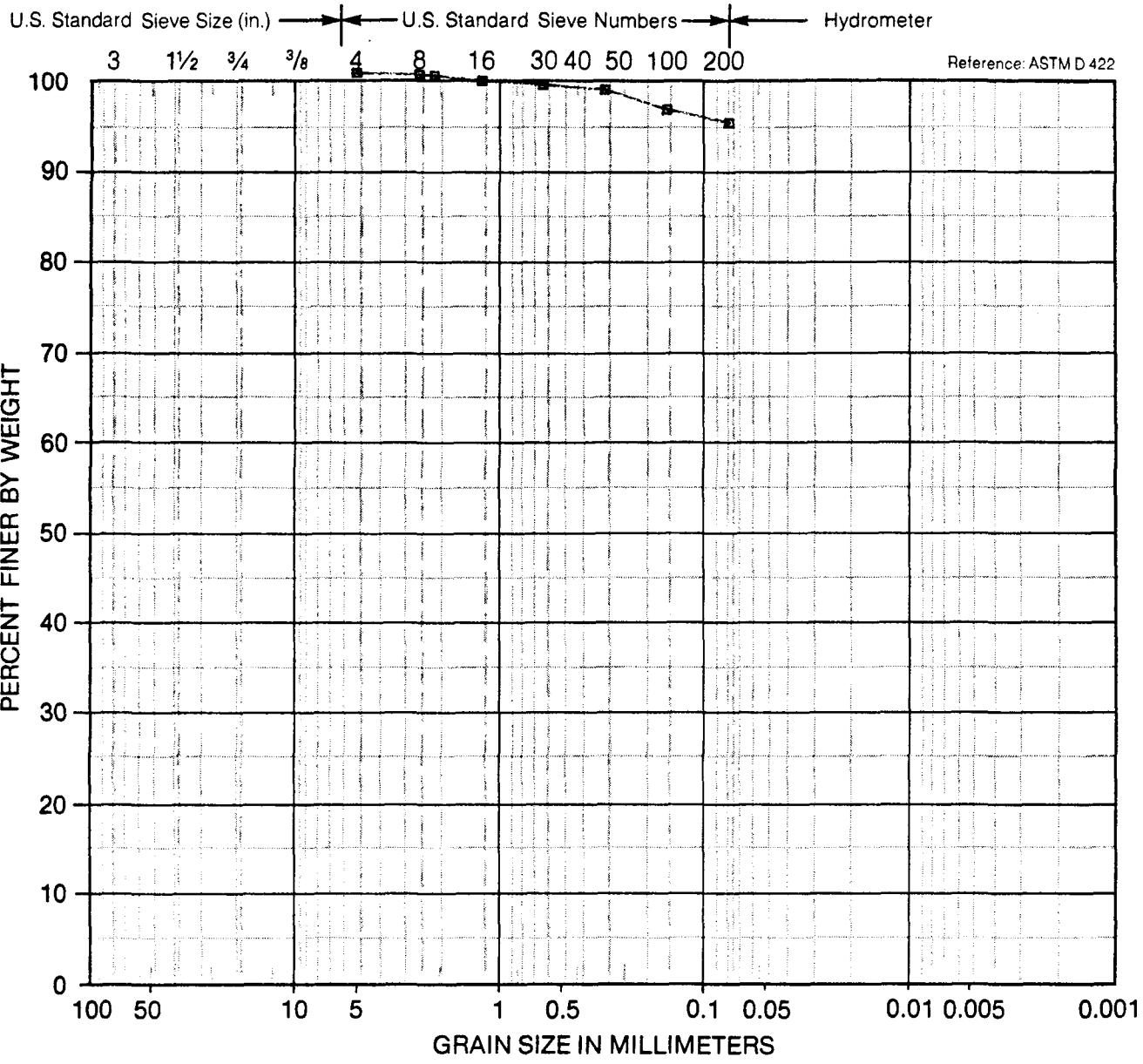
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Symbol	Sample Source	Classification
■	B025 @ 36.5 FT	GREY ELASTIC SILT (ML)



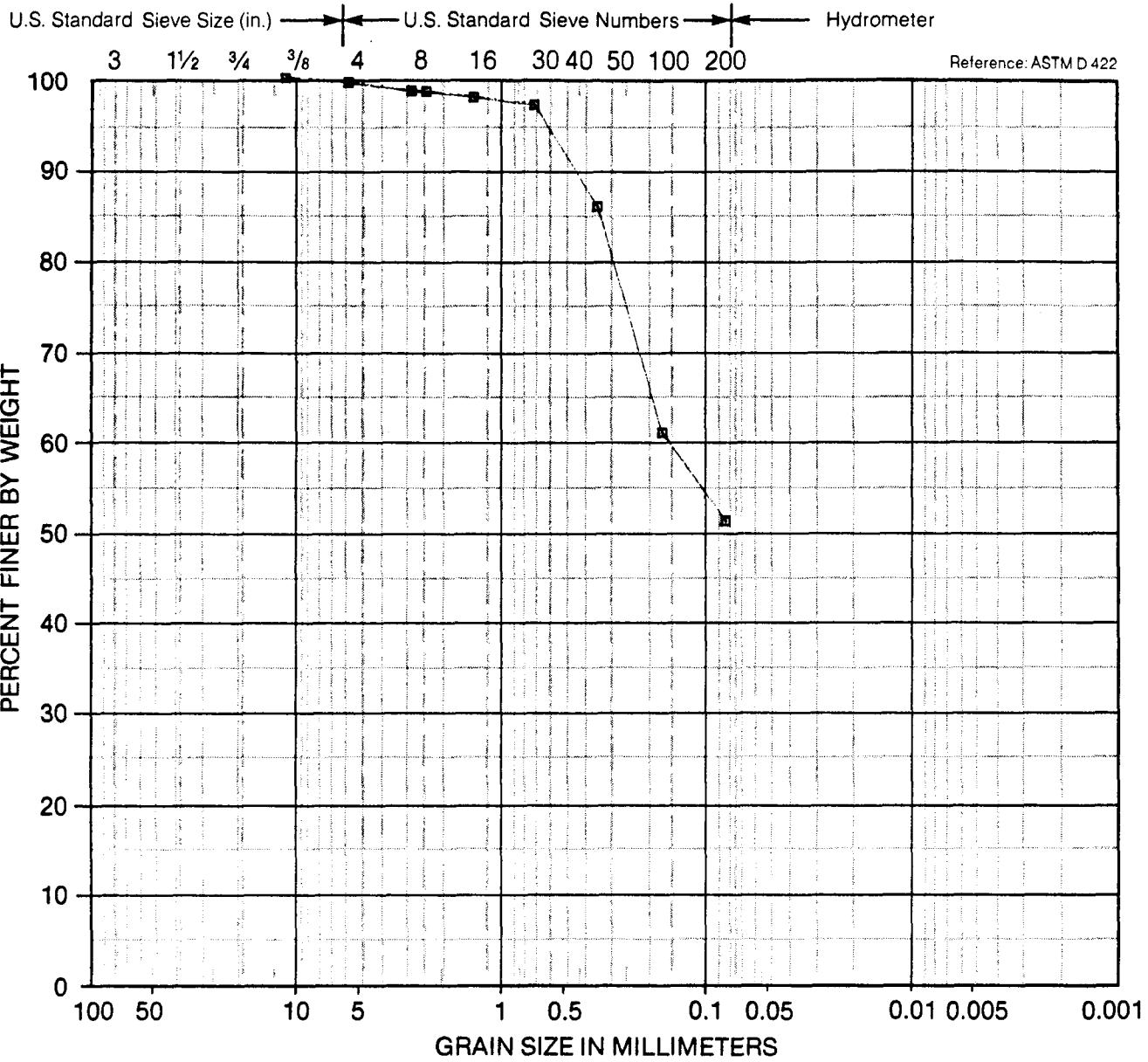
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COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT OR CLAY
	GRAVEL			SAND		

Symbol	Sample Source	Classification
■	B030 @ 2.0 FT	BROWN SANDY LEAN CLAY (CL)



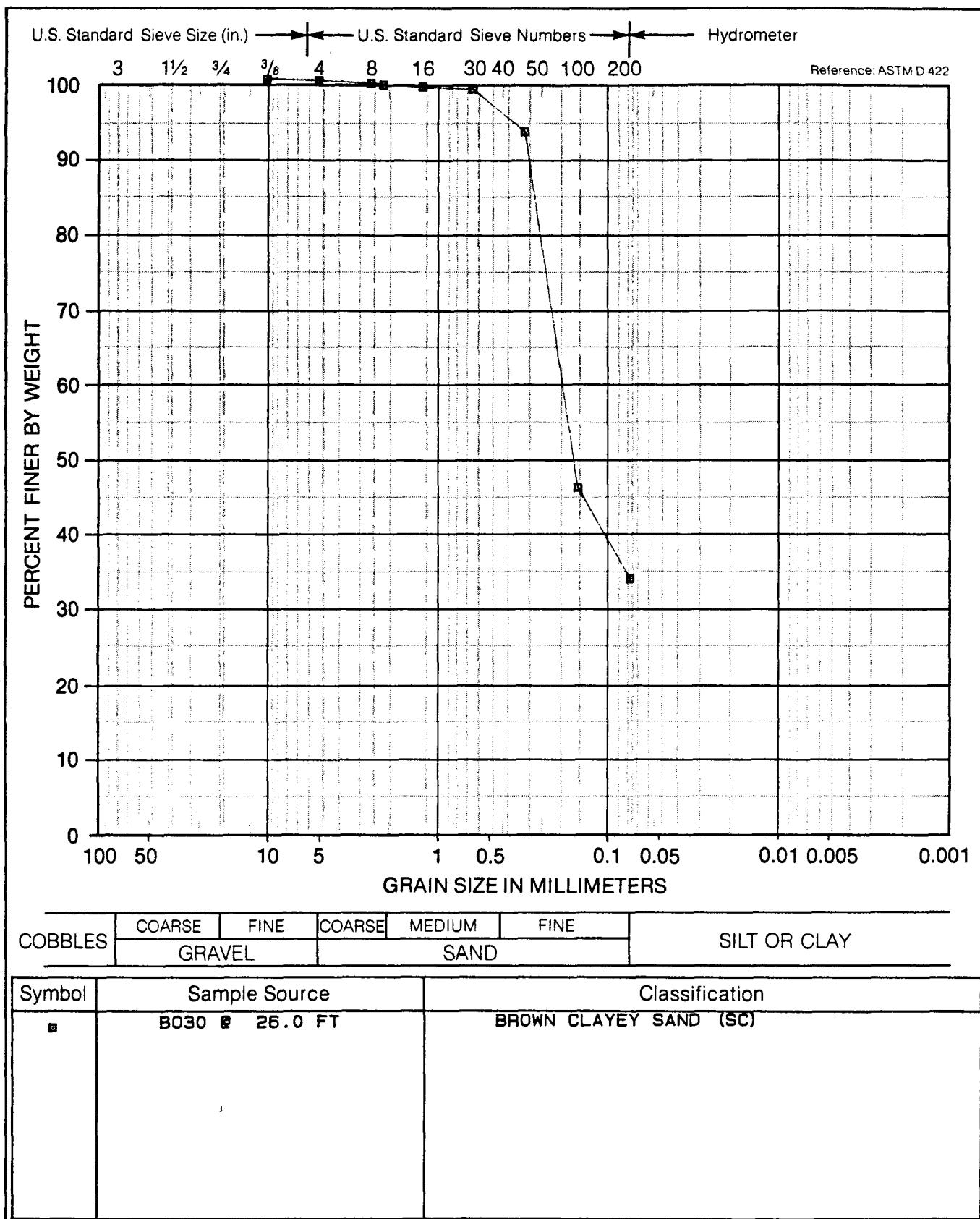
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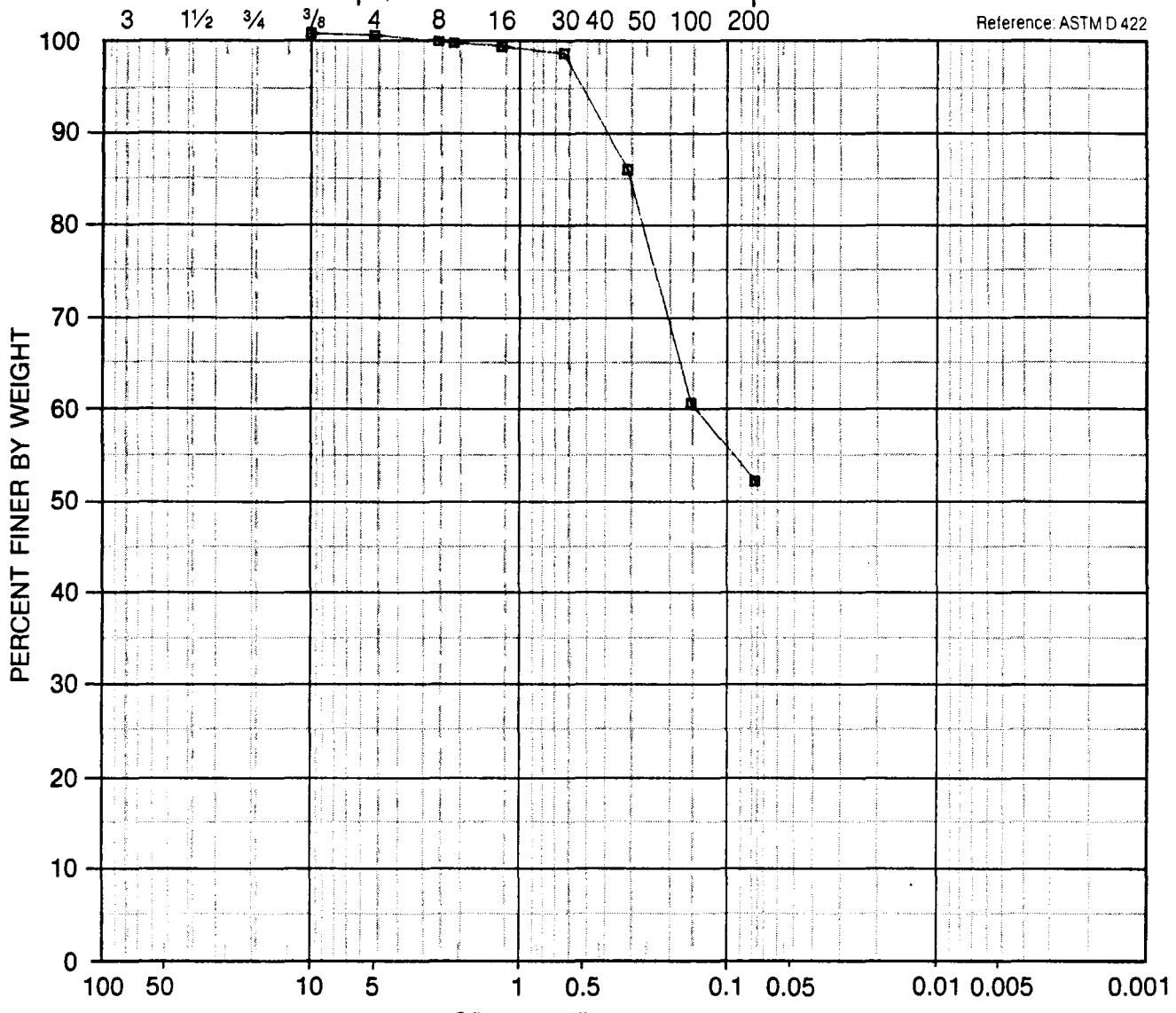
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F4

U.S. Standard Sieve Size (in.) ← U.S. Standard Sieve Numbers → Hydrometer

Reference: ASTM D 422



COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT OR CLAY
	GRAVEL			SAND		

Symbol	Sample Source	Classification
■	B032 @ 2.0 FT	BROWN SANDY LEAN CLAY (CL)



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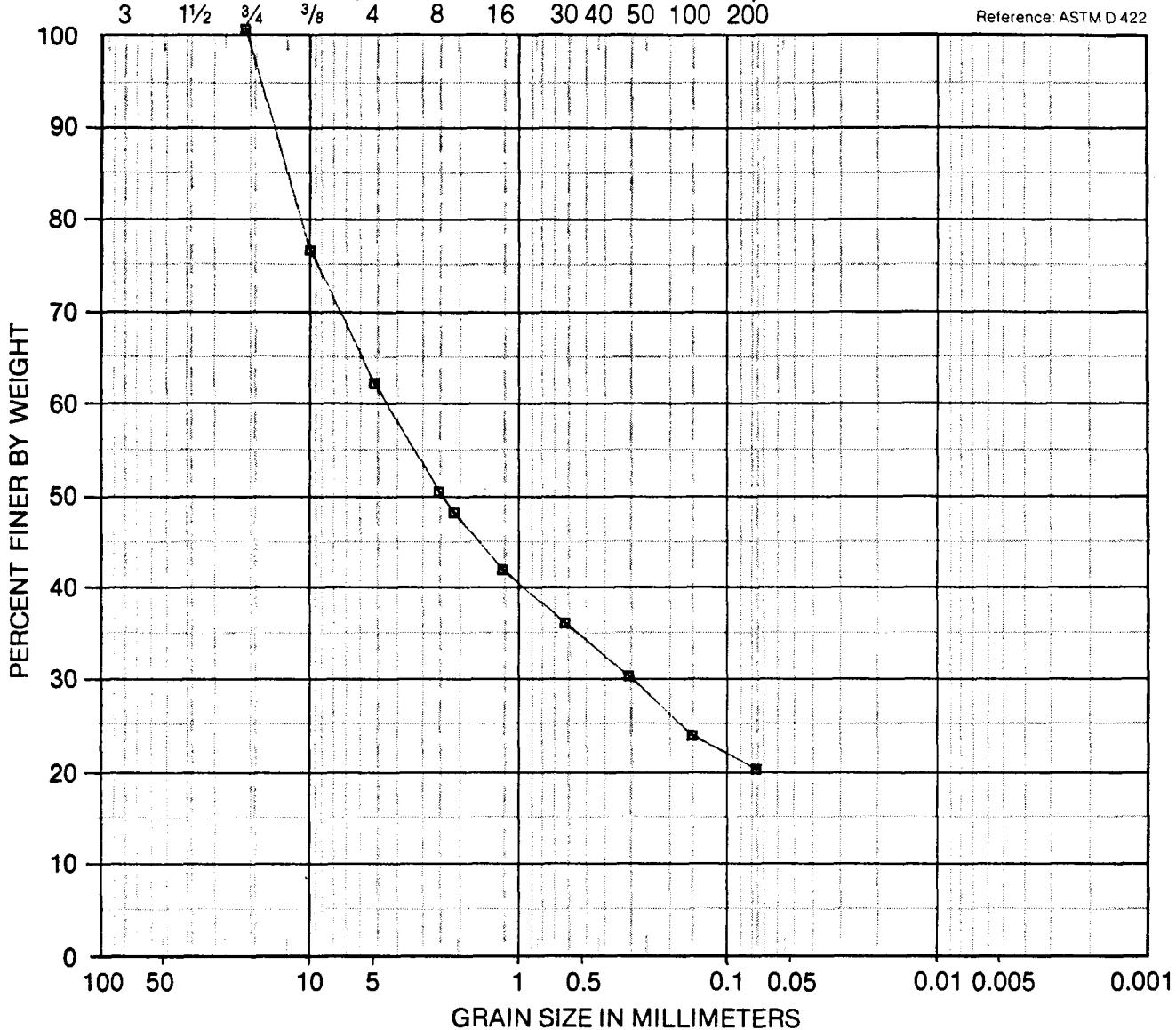
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U.S. Standard Sieve Size (in.) ← U.S. Standard Sieve Numbers ← Hydrometer

Reference: ASTM D 422



COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT OR CLAY
	GRAVEL		SAND			

Symbol	Sample Source	Classification
■	B033 @ 2.0 FT	GREY CLAYEY SAND W/GRAVEL (SC)



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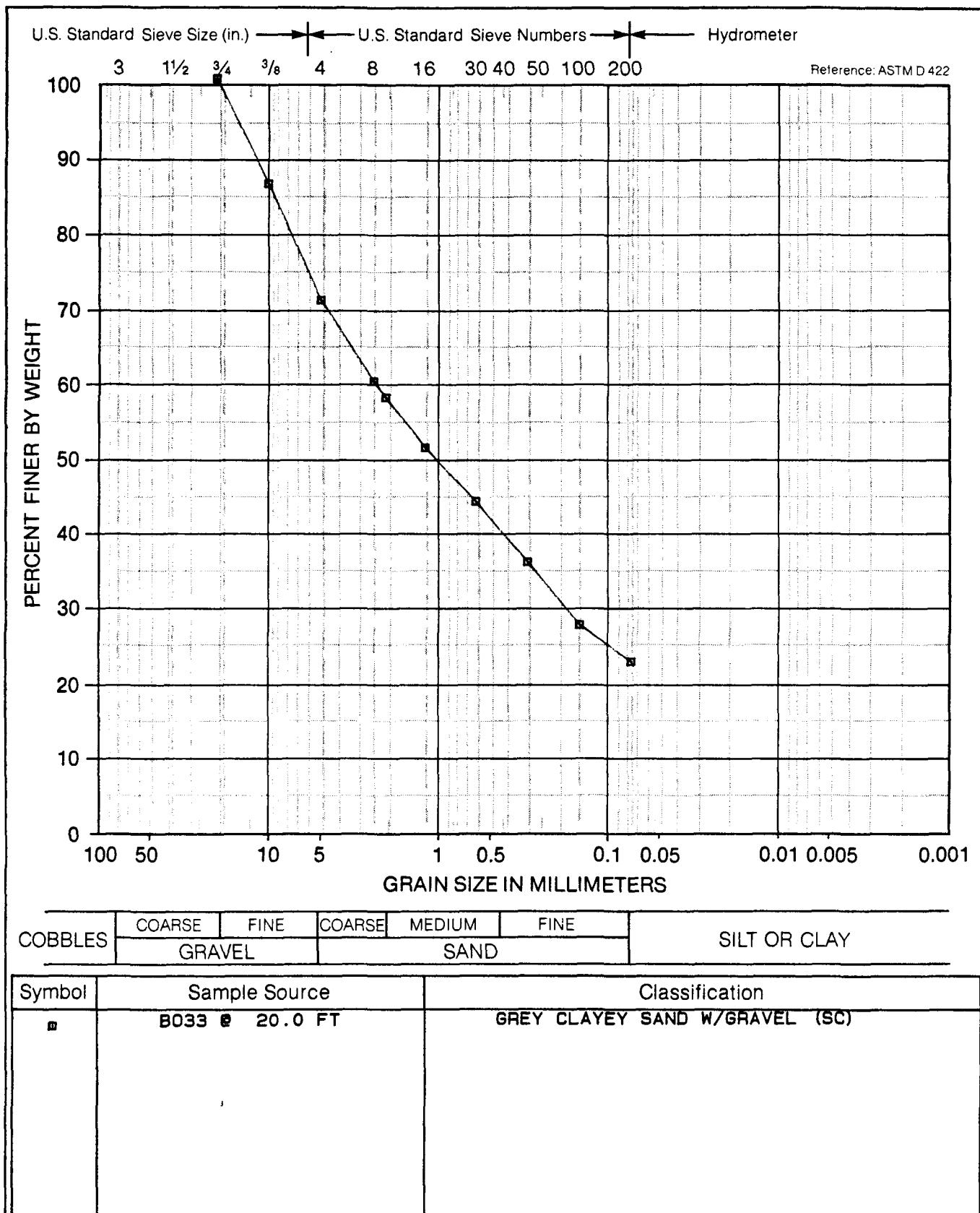
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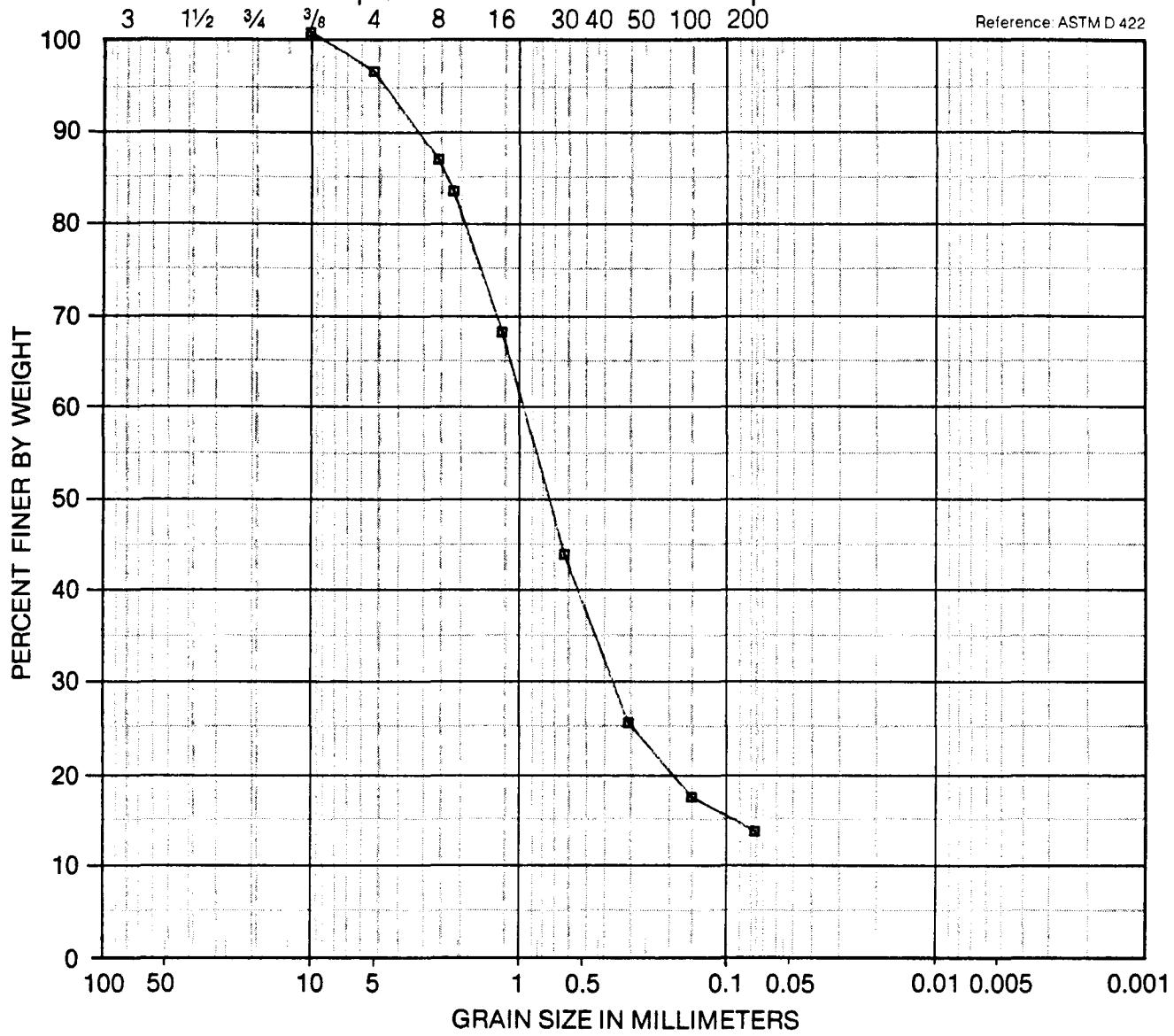
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U.S. Standard Sieve Size (in.) ← U.S. Standard Sieve Numbers → Hydrometer

Reference ASTM D 422



COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT OR CLAY
	GRAVEL		SAND			

Symbol	Sample Source	Classification
■	B034 @ 26.0 FT	RED CLAYEY SAND (SC)



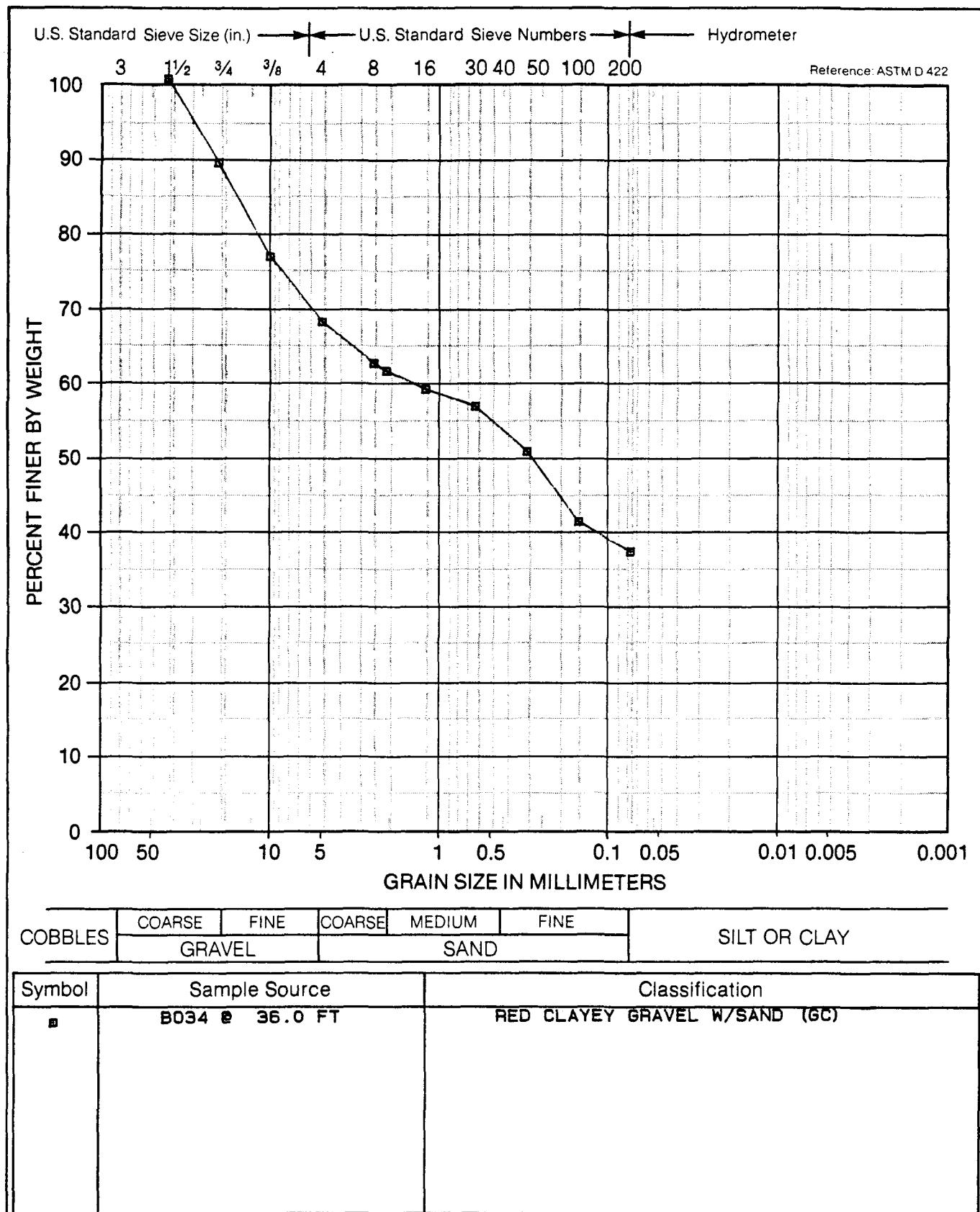
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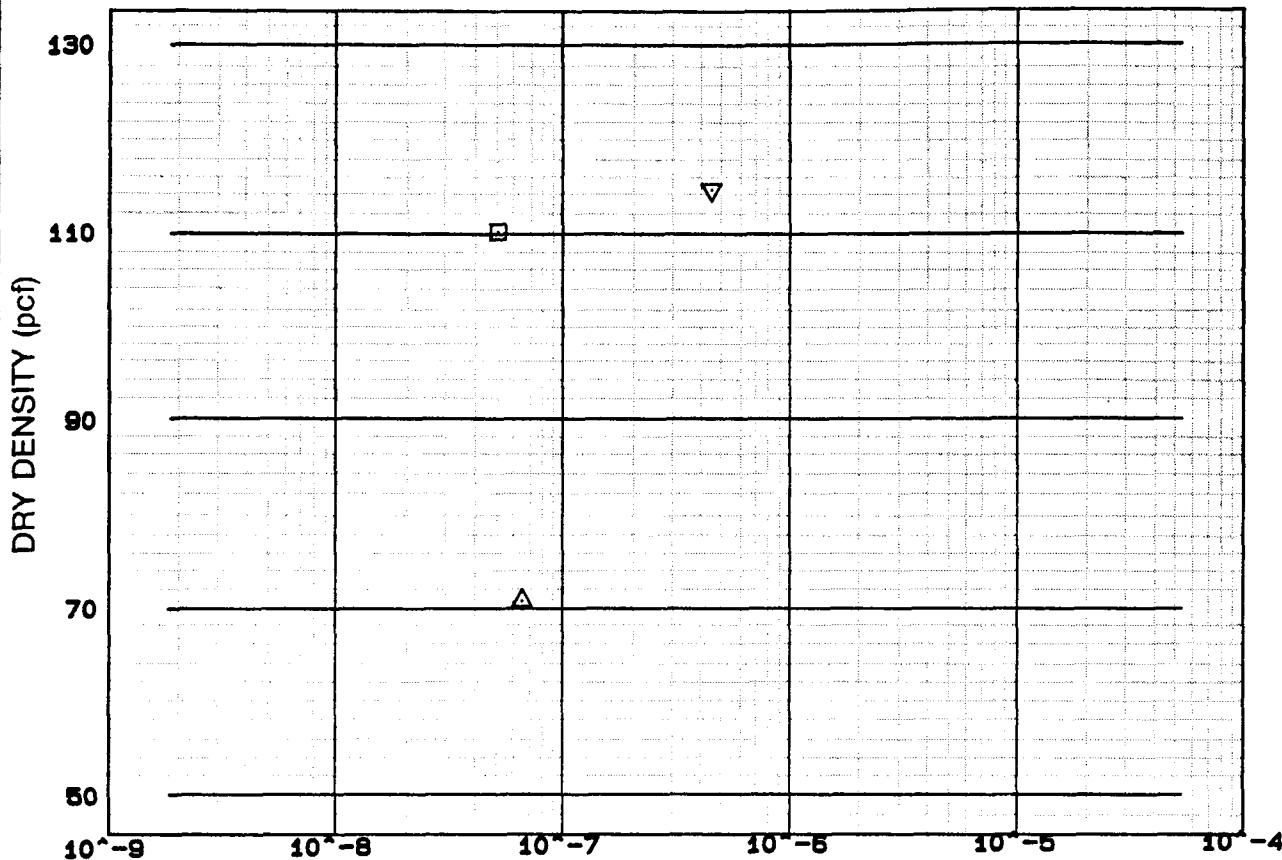
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COEFFICIENT OF PERMEABILITY (K) AT 20°C (cm/sec)

PHYSICAL CONDITIONS		TEST NO		
		A <input checked="" type="checkbox"/>	B <input type="triangle"/>	C <input type="inverted triangle"/>
INITIAL	Diameter (in)	2.39	2.88	2.41
	Height (in)	2.75	2.71	2.80
	Water Content (%)	21.1	57.2	16.2
	Dry Density (pcf)	107	66	112
	Void Ratio	0.607	1.565	0.551
	Saturation (%)	96	99	82
FINAL	Consolidation Pressure (psf)	576	576	576
	Water Content (%)	20.6	52.0	18.8
	Dry Density (pcf)	110	70	114
	Void Ratio	0.567	1.408	0.524
	Saturation (%)	100	100	100
	Permeability At 20°C (cm/sec)	5.46 E-8	6.82 E-8	4.73 E-7
Sample Source:		<input checked="" type="checkbox"/> B015	<input type="circle"/> 26.0 FT	
<input type="triangle"/> B025		<input type="circle"/> 36.5 FT	<input type="inverted triangle"/> B030	<input type="circle"/> 2.0 FT
Classification: <input checked="" type="checkbox"/> BR SNKY LEAN CLAY W/GVL CL <input type="triangle"/> GREY ELASTIC SILT (ML) <input type="inverted triangle"/> BROWN SANDY LEAN CLAY (CL)				

TEST TYPE: FALLING HEAD

SATURATION

METHOD: BACK PRESSURE



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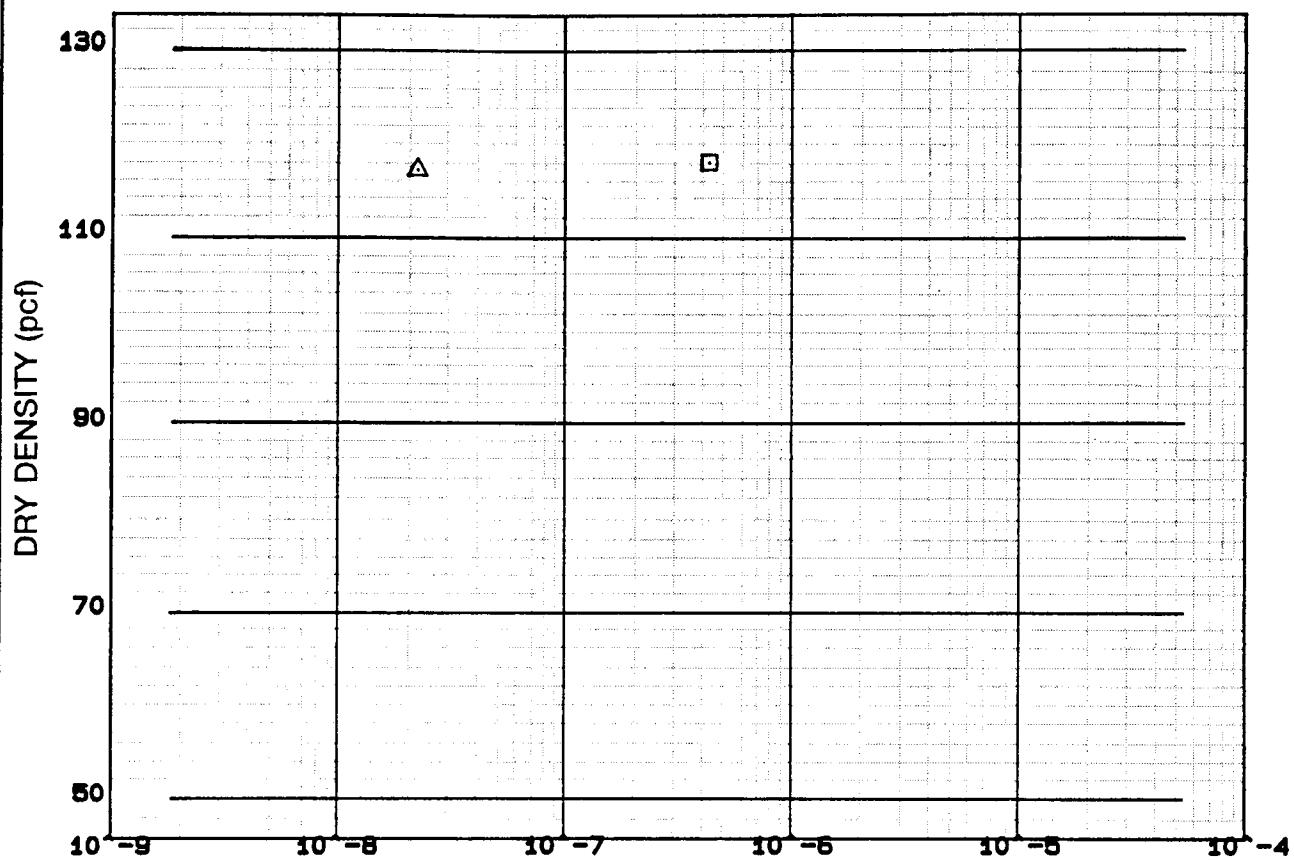
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COEFFICIENT OF PERMEABILITY (K) AT 20°C (cm/sec)

PHYSICAL CONDITIONS	TEST NO		
	A <input checked="" type="checkbox"/>	B <input checked="" type="triangle"/>	C
INITIAL	Diameter (in)	2.33	2.41
	Height (in)	2.48	2.52
	Water Content (%)	18.1	16.6
	Dry Density (pcf)	113	116
	Void Ratio	0.523	0.528
	Saturation (%)	95	89
FINAL	Consolidation Pressure (psf)	576	576
	Water Content (%)	17.0	18.5
	Dry Density (pcf)	117	116
	Void Ratio	0.469	0.522
	Saturation (%)	100	100
	Permeability At 20°C (cm/sec)	4.16 E-7	2.18 E-8
Sample Source:		<input checked="" type="checkbox"/> B030	• 25.0 FT
△ B032 • 2.0 FT			
Classification: <input checked="" type="checkbox"/> BROWN CLAYEY SAND (SC) <input checked="" type="triangle"/> BROWN SANDY LEAN CLAY (CL)			

TEST TYPE: FALLING HEAD

SATURATION

METHOD: BACK PRESSURE



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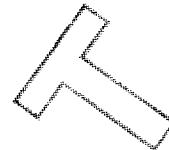
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HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**
January 16, 1992

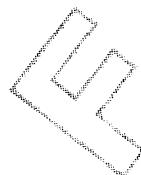


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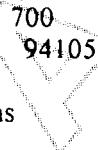


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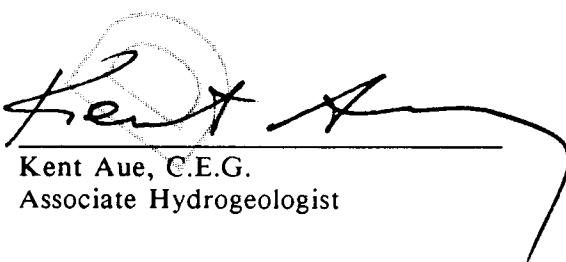
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Associate Hydrogeologist